

The Common Birds Of India

By EHA (Edward Hamilton Aitkin)

Illustrated with the author's original Pen-and-ink drawings

3RD EDITION Edited with Notes by SALIM ALI and a Biographical Sketch of the
author by W. T. LOKE

EDITOR'S PREFACE TO THE THIRD EDITION

IT is a privilege to be associated with EHA howsoever posthumously. Editor I hardly like to call myself. Any attempt to 'edit' a masterpiece like *The Common Birds Of Bombay* (now republished as *The Common Birds of India*) would be tantamount to vandalism. Therefore, I have left the text and EHA's order of sequence intact. His original pen-and-ink sketches, specially made to illustrate the articles, have also been retained. Not that photographs or more finished illustrations were unobtainable; but because of that particular quality which characterizes them as well as everything else that emanated from EHA's pen. The expressive charm of these drawings and their peculiar harmony with his writings would be impossible to replace by mere technical superiority.

The point in which this edition differs from its predecessor is in the addition of a biographical sketch at the beginning and some explanatory notes at the end. The generation that knew EHA the man is fast disappearing. So it was perhaps desirable to introduce him to the present, and to the generations still to come. My friend Wan Tho Loke, fellow ornithologist and EHA fan, does this admirably in the pages that follow. To those who know EHA only through his books, some details of his life are sure to be welcome; to those who do not know his other books the sketch will serve as a useful pointer.

In the 40 odd years since the articles were first published in the Times of India, ornithological science as well as the city of Bombay have made considerable progress. The object of the notes is to make this book more useful and intelligible to the modern reader.

Bombay, January, 1915. SALIM ALI

Biographical Sketch

INDIA'S greatest naturalist-writer Edward Hamilton Aitken, or EHA as he prefers to call himself in all his books, was born in 1851 at Satara in the Bombay Presidency. His father was the Rev. James Aitken, missionary of the Free Church of Scotland, and his mother was a sister of a gentleman who had been "missionary to the Jews at Breslau for some fifty years." The education of the boy was first undertaken by his father, but later he was sent to Bombay University whence he passed out "first in the list" with high honors. This academic success gained EHA an appointment as Reader in Latin to the Deccan College, Poona, where he worked for six years. In 1871, he added to his academic laurels with a poem in heroic couplets entitled "Suttee" which won him the Homejee Cursetjee Dadey prize. At the end of his time in Poona, EHA entered the Customs and Salt Department of the Government of Bombay and was sent to Kharaghoda (the "Dustypore" of *Traces on My Frontier*). Later still he became customs supervisor on the frontier between Goa and North Kanara. In 1883 he married. His wife the daughter of the Rev. J. Chalmers in due time bore him two sons and three daughters. In 1903 Aitken was appointed chief collector of Customs and Salt Revenues, Karachi, and two years later his talent as a writer was tardily recognized by Government by his appointment to the editorship of the District Gazetteer of Sind. This post however came as a result of the unexpected retirement of the first editor, and the recognition was perhaps more fortuitous than intentional. Even in the writing of a serious publication such as this, the irrepressible humor of EHA had to find a place. Unable to come out completely into the open, he took refuge behind the established name of Sir R. Burton and quoted that author to great effect. Thus in speaking of a E X kind of slipper popular with the ladies of Sind he quotes Burton's description of them as "a leather sole destitute of hind-quarters" and takes evident delight in that writer's description of the *surando* (an Indian musical instrument) as "a rude form of the violin, with four or five sheep-gut Strings, which are made to discourse eloquent music by a crooked bow which contains half the tail of a horse." The EHA who wrote *Behind the Bungalow* is plainly in his element in the chapter, which describes the dress, habits amusements, etc., of the people of Sind.

In 1906, at the age of fifty-five, EHA retired from India and went to live in Edinburgh in his native Scotland. There he hoped to have leisure enough to set down his many Indian experiences. Some of his articles, written in retirement, were published in English magazines and after his death were collected into a volume called *Concerning Animals and Other Matters*. But the time allowed him was short. For one who had lived almost his entire life in India, the change to a severe northern, climate served only to aggravate the illness from which he was suffering. On the 11th of April 1909, he died of Bright's disease. Some weeks before his death his sight failed, but the discovery of the disease at this late stage meant the abandonment of all hope of recovery. There is a pathetic little story of EHA some time before his death, spending a day in the churchyard at Morningside (the selfsame church-yard where he was finally laid to rest) and saying to his wife afterwards that he meant in future to go there more often to watch the birds at their nesting. EHA was always an optimist, always looked on the bright side of things, and this little piece of the irony of fate is of the kind, which belongs to the great Tragedians. It will always be to the sorrow of those of us who admire him that, now that

he was free from having to jot down notes "in the midst of red-tape, fuchsine and foolscap," the time was not allowed him to write at leisure. Thus ended the uneventful, but by no means unproductive, life of a man who combines something of the powers of observation of a Hudson, the grace of expression of a Gilbert White, and the wit and humor of a Stephen Leacock, is already by common consent the greatest of Indian naturalist-writers.

T. R. Bell (a naturalist-crony and co-worker of EHA) writing of him after his death said: "He was a good man in every sense of the word; a strongly religious man, a pleasant companion, broad minded, exceedingly tolerant of the weaknesses of others, gentle and lovable and a rare example of a man without a single enemy." This, some may say, is praise "in the language of the tombstones", but even to those who know him well only from his books the praise does not appear exaggerated. In the company of his fellow men EHA was a quiet person--the observer rather than the talker--which is what one might expect. Also, perhaps for that reason, he was an ideal companion on rambles into the country. "He whose ear is untaught to enjoy the harmonious discord of the birds, travels alone when he might have company"--so EHA himself wrote and with him as companion his friends, we may be sure, never suffered from this form of loneliness. In his home he always kept many pets and a friend, Surgeon-General Bannerman, often found himself having to go on unpleasant trips to the "primeval forests of Cumballa Hill" to look for mosquito larvae to feed the fish. In appearance EHA has been described as a "long, thin, erect, bearded man...with a typically Scots face lit up with the humorous twinkle one came to know so well." A photograph taken in 1902 shows a fringe of hair encircling a baldhead, a condition which "Kemp's Equatorial Hair Douche" appears to have been unable to prevent. This gives point to the unpublished note in his annotated copy of Barnes's *Birds of the Bombay Presidency* in which he complains that, while watching a Spotted Owlet with young, the parent bird, "swooped down twice and hit me a severe blow on the head, scratching the skin slightly." Although quiet in company, EHA could on occasion be a great talker and the humor which always showed as a twinkle in his eyes must then have shone and sparkled in the bright dress of words. The claim that EHA is India's greatest naturalist-writer needs to be examined. In the field of original scientific research he contributed little, and except for some work on mosquitoes and butterflies, there is nothing by which posterity will remember him. His fame rests on six books, one of which was published after his death. In order of publication these are they: *-Tribes on my Frontier, Behind the Bungalow, A Naturalist on the Prowl, The Common Birds of Bombay*, (now *The Common Birds of India*), *The Five Windows of the Soul* and *Concerning Animals and Other Matters*. Four of them are on natural history subjects; *Behind the Bungalow* is a series of pen-portraits of Indian servants and contains some of his best and most amusing writing. The Cambridge History of English Literature speaking of the book says of the author that he has "few rivals in this class of writing, the predominant feature of which is a gay and light-hearted attitude towards the ordinary things, even the ordinary annoyances, of Indian rural life." The *Five Windows of the Soul* a curious blend of biology, philosophy and religion. EHA is said to have considered it to be his best book but few modern readers will, I think, agree with him.

A careful and patient observer, he wrote with charm, and, above all, possessed in an

unparalleled degree wit and humor -- qualities which distinguish his writings from most of the writings of other naturalists. Now a man who is noted for his wit and humor is apt to suffer from his gift, in that people never take him seriously nor credit him with ability to do serious work. In the case of EHA, I should certainly say that, had his books not contained a single flash of wit their other qualities would still have made them exceptional. Here, for instance, is the careful observer: "From the experience gained in my early days I know that a caterpillar eats from the edge in curves, but a beetle eats holes out of the middle of a leaf, and a leaf-cutting bee cuts out neat semi-circular pieces all of the same size. A cricket or grasshopper, may eat like a caterpillar, but when it has finished its meal it hops away to another branch, while caterpillar, being an indifferent walker, will generally stay at one place, finishing leaf after leaf." Careful observation and keen eyes first noticed that migration of the common butterfly *Euploea core* over Bombay always meant the coming of the rains; their return migration likewise signified the end of the monsoon. Imagination and charm are in his books too. The Banian tree, says he, "sent down to the ground roots from its branches and made to itself crutches for its old age." And the Paddy Bird, or Pond Heron, which because it is little persecuted, allows "you to approach within a few paces before it suddenly produces a pair of snowy wings from its pockets and flaps away." (Exactly what happens too!)

Like all great artists EHA uses imagery for emphasis and with memorable effect. Of the Vultures he says: "That bald head and bare neck are not ornamental, but they mean business: they are the sleeves tucked up for earnest work." (Indeed the whole of the chapter on the vultures in our book is a masterpiece of humor and fine writing). Comparisons when they are made by a great artist, we may note, are never odious.

Grace of writing is not lacking either. The following passage about the cricket would have done credit to Gilbert White. "As it threads its perilous way among centipede haunted wilds, exploring the path with its long antennae, it hears, with mingled feelings, the martial tramp of an army of ants, the peaceful browsing of caterpillars, the rustle of earth-worms cautiously drawing dead leaves into their holes, and the music which the wind makes with the tender spikes of growing grass; that rise, like telegraph posts, all about it. And it hears the voices of its own kind, the chirping of fellow crickets. Then it knows that it is not alone: it chirps in reply, and enjoys the cheerful pleasures of social intercourse."

Keen observation, imagination, elegant writing, and vividness of description--all these qualities go to make up a unique style. Add to these a magnificent sense of humor and you have the supreme artist who, in the *Common Birds*, so vividly describes his birds that, even without colored plates, he makes them perfectly recognizable in the field. The secret of course is plain. With an intimate knowledge of birds, EHA picks out for mention the special characteristics of each one of them and then, as in the instances quoted, driving home his point with unforgettable phrases. There is much poetry in EHA's writing--writing which, built on the solid foundation of sound observation, is yet made immortal by the magic power of words.

His wit and humor are, of course, unfailing. They are a tide, which has left ripples of

laughter in the sands of time. Scattered in abundance throughout his pages they sparkle, scintillate and mock. Now it is a wisecrack at the crab, now a jibe at the rich Muscovite of the ancient regime, now a jaunty remark about the ant, or migration, or the sparrow, or about himself. One illustration must suffice: the reader will have the pleasure of finding the rest for himself. These are his famous introductory remarks in the essay on the *Dhobie*. "I am an amateur philosopher and amuse myself detecting essence beneath semblance and tracing the same principle running through things the outward aspect of which is widely different. I have studied the *Dhobie* in this spirit and find him to be nothing else than an example of the abnormal development, under favorable conditions, of a disposition which is not only common to humanity, but pervades the whole animal kingdom. A puppy rending slippers, a child tearing up its picture books, a mongoose killing twenty chickens to feed on one, a free-thinker demolishing ancient superstitions, what are they all but, *Dhobies* in embryo! Destruction is so much easier than construction, and so much more rapid and abundant in its visible results, that the devastator feels a jubilant joy in his work, of which the tardy builder knows nothing. As the lightning scorns the oak, as the fire triumphs over the venerable pile, as the swollen river scoffs at the P.W.D. while arch after arch tumbles into its gurgling whirlpools, so the *Dhobie*, dashing your cambric and fine linen against the stones, shattering a button, fraying a hem, or rending a seam at every stroke, feels a triumphant contempt for the miserable creature whose plodding needle and thread put the garment together. This feeling is the germ from which the *Dhobie* has grown. Day after day he has stood before the great black stone and wreaked his rage upon shirt and trouser and coat, and coat and trouser and shirt. Then he has wrung them as if he were wringing the necks of poultry, and fixed them on his drying line with thorns and spikes, and finally he has taken the garments to his torture chamber and ploughed them with his iron, longwise and crosswise and slantwise, and dropped glowing cinders in their tenderest places. Son has followed father through countless generations in cultivating this passion for destruction, until it has become the monstrous growth which we see and shudder at in the *Dhobie*."

And now I leave the reader to discover EHA and the birds of Bombay for himself. The *Common Birds of Bombay* is an excellent introduction, not only to the wild life of India, but also to the author who wrote it. If by your reading of the one your attention is turned not only to "Nature's infinite book" but also to EHA's other books, we who present you this new edition, *The Common Birds of India*, will feel that we have repaid a debt long owed to EHA for the pleasure, which he has already given us. India, from the point of view of the naturalist, is largely an unexplored field. Take birds for instance: in England not more than 500 species have ever been recorded, each of which has been carefully observed and written about; in India we have more than 2,000 and there is still plenty to find out about most of them. For those with eyes to see, life in India (and elsewhere too for that matter) need never be dull. On the frontiers of every man there are multitudinous, strange fascinating "tribes." Watching them will bring you a new exhilaration and interest in life. "Any hobby will draw out the mind; but the one I plead for touches the soul too, keeps the milk of human kindness from souring, puts a gentle poetry into the prosiest life"--so wrote EHA many years ago. What was true for him is doubly true for us to day.

W. T. L.

PREFACE TO FIRST EDITION.

THESE papers were published first in the TIMES OF INDIA. They are republished with some additions, at the instigation of friends, in the hope that they may be helpful even beyond the limits of the Bombay Presidency; for the common birds of Bombay are for the most part identical with the common birds of India.

EHA

CHAPTER 1

INTRODUCTORY

DURING the last year or two I have been repeatedly pressed to write simple account of the Birds of Bombay. It has been represented to me that there are many who would like to know the common birds that appear in their gardens and about their houses to learn their names and something of their natures, without "collecting" them, and that there is no book from which such persons can get much help. I confess that scarcely any argument could appeal more strongly to my nature than this. For I think that the study of natural history fails of its finest fruit if it does not lead us to regard living creatures generally with a kindly and sympathetic interest which tends to make all needless sacrifice of their lives more and more repugnant to our feelings. The first steps may have to be taken through blood, and I must own that in my boyhood I was murderous in heart, but not in hand, for I had no gun, only a catapult; and for this I am thankful. I seldom killed anything, while the hours I spent in stalking my game and watching for a chance of getting a fair shot taught me more about the personal habits of birds than I could have learned in any other way. Since that I have shot a great many beautiful and harmless birds with ever-increasing reluctance, but there was no other means of becoming acquainted with them. The descriptions in Jerdon and Barnes and Oates all presuppose a specimen in your hand, to be measured with a foot rule and examined feather by feather. There was no museum to which I could resort, and it was seldom my lot to fall in with anybody who could enlighten me if I asked, "What bird is that?" Most gladly therefore would I try to make atonement now by helping others to know without killing, as far as it lies in me.

But I am afraid that the kind friends who ask me to write an account of the Birds of Bombay have a very faint idea of the difficulties of the task. In the first place nobody knows, till he has tried it, how difficult a matter it is to make such an object as a bird in a tree recognizable by means of words. A picture would often do it in an instant, but there are no pictures of the birds of India, at least none worth mentioning. I hope that the simple drawings, which head these chapters, will prove useful so far as they go.

Again, what are the Birds of Bombay? Imagine one undertaking to describe the human inhabitants of Bombay. I am told that the Czar of Russia has eight hundred subjects in our island. I suppose that the Ameer of Afghanistan has many more, to say nothing of the

Khan of Khelat and the Akhund of Swat. The heathen Chinee is not scarce, and I have seen the Jap, there are certainly Persians and Turks and Egyptians and Negroes and Burmans and Malays and Jews of several varieties and Armenians; and every nation in Europe is represented. In short, what country is there of which one can say with any confidence that there is not one native of it in Bombay! Franz Joseph Land perhaps. And the case is pretty much the same with the feathered population. Bombay has of course its own peculiar resident avifauna; but it lies between the Indian continent on the one hand and the ocean on the other, and receives contributions from both. A storm at any time may toss the Frigate Bird or the Booby on our shores, and a misguided Hornbill may make its appearance on Malabar Hill. Then there is a host of birds of passage, which regularly visit us every cold season, or drop in on us *en passant*, as quails drop on board of a P. and O. steamer on its way through the Mediterranean. And last, but by no means least as an element of perplexity, there are at all times escaped captives from the cages in the Crawford Market, which wander about the island in vagabondage until the crows kill them, or settle down and make themselves comfortable among us. I have heard a cockatoo making the primeval forests of Cumballa Hill echo with the joyful roar of freedom. A Persian Bulbul once escaped from one of my own cages and reappeared next morning with a companion! If I remember I caught them both. Canaries of course are common. I once caught a fine one with my hand in one of our churches; I had better not say which, though the Bishop and the Archdeacon of that time have both retired. It came in during the service and perched above the pulpit, where the sermon soon put it to sleep. But the most perplexing foreigners are those, which find that the climate suits them, and make themselves at home. The Blue Java Sparrow is an example. I should not be much surprised if I found that bird making its nest in some bush about Worlee or Sewree. In these circumstances I have decided to protect myself with the title The Common Birds of Bombay. If anybody convicts me of omitting a well-known bird, I can maintain that it is not "common" as I understand the term. And if I succeed in making it even a little easier for any one to take an intelligent and kindly interest in the lives of those bright beings which do so much to enliven our surroundings, still more if I succeed in any measure in staying the hand of slaughter, whether raised in the name of sport or science, I shall have my reward.

Birds constitute the second class of the vertebrate animals, being higher than the reptiles in that their blood is warm, and lower than the beasts in that they do not suckle their young but lay eggs. There are other points in which they differ from both. They have no lips nor teeth, their mouths being encased in horn and consolidated into a beak. That they are clothed with feathers we all know, but few have any idea of the properties of that wonderful garment. The long, stiff feathers of the wing, called "quills," are little oars, or fans, for beating the air, and those of the tail form an expanding and collapsing rudder; but the body clothing is of softer plumes, so constructed and so arranged as to combine all the diverse qualities of all the fabrics that man has ever woven for his own comfort or adornment. Each feather is at its point a scale, or leaf, smooth, soft, porous and yet waterproof: but at the base it is disheveled and downy. Each keeps its place and overlaps the next so as to form a smooth and even surface and an unbroken pattern; but the down is underneath. When the bird goes to bed it shakes up its plumage and is wrapped in an eiderdown quilt; but startle it and in an instant every feather is pressed firmly down and

the compact little body is prepared to cleave the air as a scale-clothed fish cleaves the water.

But the most vital difference between birds and all other vertebrate animals lies in the fact that their forelimbs are converted into organs of flight. This handicaps them in many ways, as any one may see for himself by watching a squirrel and a sparrow dealing with a crust of bread: but it admits them to a realm which is closed against four footed creatures. The sky is their territory and the trees are their home. They breathe pure air, they look round them on fields and hills and sky, and they see the beasts and man himself crawling on the ground beneath them. Conditions such as these modify the characters of nations and it would be foolish to suppose that they are without effect on birds. It is from these surely that they draw that joy of life, which is their richest inheritance, which opens the eye to beauty and the ear to music, which expresses itself in all grace of form and movement, and inclines spontaneously to love. And so, though beasts rank above them anatomically and physiologically, birds have in many respects a higher nature. Their wits are quicker, their thoughts sweeter, their tastes finer and their passions and appetites less gross. With respect to manners and morals they stand on a higher plane altogether. The institution of the family, which is the most sacred thing in our social system, is almost unknown among beasts, but it exists among birds in its purest form. The great majority of them indeed are monogamous during the nesting season, and many pair for life and become devotedly attached to each other. Brides are won by courtship.

In their personal habits birds are particularly tidy and clean. Much of their time is spent in the duties, or pleasures, of the toilet. Many of them bathe regularly in water, while others prefer a dust bath: some, like the common Sparrow, indulge in both as they have opportunity. Nature gives them an entire new suit every year, sometimes two, in which case the summer and winter suits are often different. If there is any difference between the sexes it is the male which is most beautifully, or at least most brilliantly, dressed; as is fit, for he is in the front ranks, fighting and making love, while her place is in the sweet backgrounds of life, and quietness and modesty adorn her best. Why civilized man has proceeded upon exactly the opposite principle is a question for philosophers. The male bird is generally the larger and stronger, but this rule is reversed among the birds of prey: the mothers of eagles need to be Amazons.

I wish to avoid everything technical as far as I can but some sort of classification is necessary. And I have decided to follow that adopted by Jerdon. It is said to be unscientific and out of date, and doubtless it is: but it is familiar (which is the main thing) and all our bird literature was founded on it until lately. Even now, though *The Fauna of British India* must displace all previous publications as the standard textbook of naturalists in India, Jerdon is not superseded. His three volumes contain an account of Indian birds and their ways, which has no rival yet. Besides this, I must confess that I consider Cuvier's classification (which Jerdon adopted with slight modifications) is practically more helpful than any of the tentative systems, which are now competing for its place. He based his arrangement almost entirely upon the form of the beak and feet, which are the instruments by which a bird makes its living. This is a simple and a sound principle, which we put in practice when we recognize a Hindoo barber by the case of

instruments which he wears on his stomach, and a coolie by his basket. In an Appendix will be found some brief directions for the application of this principle, and the index will show how the birds are distributed into Orders and Tribes, or Families. Here we may proceed without further formality, beginning with Cuvier's first Order, the Raptors, or birds of prey, which have sharp, curved talons for seizing their game, and hooked beaks for tearing its flesh.

CHAPTER II

THE VULTURES

IF the city of Bombay had a tutelary bird, there is no manner of doubt what bird that should be. I do not know why the ancient Egyptians deified the Ibis, but if Bombay bore the proud figure of a Vulture *rampant* on her shield, everybody would know why. Of all the unsalaried public servants who have identified themselves with this city and devoted their energies to its welfare, 40 other can take a place beside the vulture. Unfortunately the vulture has never lent itself to the spirit of heraldry. The eagle has, strangely enough, though the difference between the two is not very clearly marked in the popular their place I mind. The translators of our Bible had no notion of it. Modern natural history has disentangled the two names and assigned them to two very different families of birds, the distinction between which in its essence is just this, that, while the eagle kills its prey, the less impatient vulture waits decently till its time comes to die. Popular sentiment persists in regarding the former as the more noble, but there can be no question, which is the more useful. It is not easy indeed to realize to oneself the extent and beneficence of the work carried on throughout the length and breadth of India, from year's end to year's end, by the mighty race of vultures. Every day and all day they are patrolling the sky at a height, which brings half a revenue district within their ken. The worn-out bullock falls under the yoke, never to rise again, and is dragged off the road and left; or the old cow which has ceased to be profitable and has therefore ceased to be fed, lies down in a ditch for the last time. Before the life has left the old body some distant "pater-roller" has seen it, and, with rigid wings slightly curved, is sloping down at a rate, which wipes out five miles in a few seconds. A second sees the first and, interpreting its action follows with all speed. A third pursues the second, and so on till, out of a sky in which you could not have described two birds half an hour ago, thirty or forty dark forms are converging on one spot. When they get right over it, they descend in decreasing spirals and settle at various distances and wait for the end like American reporters. When the end comes, if you are squeamish or fastidious, go away. All that will corrupt, everything in short but the bones, is to be removed from that carcass within twenty-four hours, and the vultures have taken the contract to do it. Such work cannot be made artistic and the vulture is not an aesthete. That baldhead and bare neck are not ornamental, but they mean business; they are the sleeves tucked up for earnest work. It is a merciful and, I suppose, a necessary provision of nature, that every creature gets reconciled to its able even to take pleasure in that, which would be painful to others. The vulture enjoys the full benefit of this provision. It is in fact art enthusiast in its profession, and these funeral wakes become scenes of riotous and ghoulish glee to which I confess that even philosophic reflection fails to impart moral beauty. The gourmands jostle and bump each other

And chase each other round the board with long, ungainly hops and open wings. One has no sooner thrust its head well into the carcass than another leaps upon its back with loud laughter. Two get hold of opposite ends of a long strip of offal and dance before each other with wings outstretched. And the cackling and grunting and roaring that go on all the while may be heard for half a mile. When darkness overtakes the revellers some of them have so shamefully over-eaten themselves that they cannot rise from the ground and are forced to spend the night where they are. They seem to be quite safe, however. The jackal is not a fastidious feeder, but it draws the line at vultures. These scenes used not very long ago to be enacted regularly on the Flats, where the carcasses of horses and cattle were skinned and left.

The vultures that one sees in such numbers on Malabar Hill belong to two species, which are easy enough to distinguish when once one's attention has been turned to the difference between them. The commoner of the two, the White-backed or Bengal Vulture (*Gyps bengalensis*), is a smokey-black bird, with a band of white extending nearly the whole length of each wing on the under side. This band is broken by the dark body, and that serves to distinguish the bird at a glance. The other species is the Long-billed Vulture (*Gyps pallescens*). Jerdon confounded it with another species and-called it *Gyps indicus*. Its general color is brown, darker or lighter according to age, sometimes almost whitey brown; but, however light the under parts may be, body and wings are alike. The two species are about the same size and larger than one would suspect who has only seen them at a distance. A good specimen will measure over seven feet from tip to tip of the wings. There is one curious difference in their habits. The Long-billed Vulture breeds always on high cliffs," while its Bengal brother is content to build its nest on any tree big enough to bear the weight of such a ponderous I have seen a single mango tree groaning under several nests. Each nest contains one egg, generally (if clean), but sometimes blotched with brown. The breeding season extends over the greater part of the year and eggs may be found from September to March at least. Most young birds are hungry and clamorous, like the daughters of the horse leach, crying give, give, from dawn till dusk. But the young vulture learns patience early. Its mother leaves it before sunrise and it sits hour after hour, motionless and noiseless, waiting for her return. Noon may be on before it descries her, a mere speck in the sky, but growing bigger every moment as she slopes down towards the nest. At last, with heavy happing, she lets herself down, and great is the cackling, for though she carries nothing in her beak, the youngster knows that she is loaded. What follows is not polite. In plain language she disgorges great lumps of meat and thrusts them into its mouth. A crow sits close by, mindful of the proverb that there's many a slip 'twixt the cup and the lip. A vulture cannot feed her young any other way than this, for the carcass on which she dined may be ten miles away. And indeed I never saw a vulture carrying food, or anything else, except a stick for its nest, and that in its beak. All other birds of prey carry with their feet, but this is impossible to the vulture because it is incapable of swooping and cannot even rise off the ground without taking a run. Once fairly in the air, no bird surpasses the majesty of its flight. The question has often been hotly discussed whether birds can sail without happing their wings. The difficulty originated of course with somebody of that unfortunate class who must reason about questions of fact instead of looking. He demonstrated that such a feat was impossible. The vultures kept on doing it all the same, and any one may watch them. For

hours together they will sail in circles, or rather in spirals, without the slightest motion of their wings, beyond trimming them to the wind like the sails of a boat. Of course there must be a wind.

There are two other kinds of vultures, which may occasionally be seen in Bombay. One is the King Vulture (*Otus calvus*), a royal bird, not indeed larger than the others, but of nobler aspect and prouder character. It appears singly, or with its mate, and will consort with the herd. When it comes to a carcass, the others have to stand by till it has dined." There is no difficulty in recognizing this species by its deep black color, relieved only by two pure white patches on its thighs and by the blood red tint of its bare head and neck. It builds on some solitary tree and lays a single white egg.

Our fourth vulture is that foul bird known as Pharaoh's Chicken, and by other more opprobrious nicknames. Its title in science is *Neophron ginginianus*. It is one of the commonest birds about Poona and everywhere on the plains of the Deccan, but seldom visits the coast. I have, however, seen a pair on more than one occasion about the Flats. It is a white bird, not much bigger than a kite, with only the quill feathers of the wing black. Its bill is long and thin, its naked face yellow, and its tail wedge shaped. Its neck is Rot bare, but clothed with long, rusty-white feathers, pointing backwards. It does not stand upright, like the true vultures, but carries its body like a duck and steps like a recruit. By these signs you may know Pharaoh's Chicken. It makes its shabby nest, of sticks, rags and rubbish, on trees, ledges of public buildings, or anywhere, about March, and lays two white eggs, more or less blotched with brown. For the first year the young birds are brown all over and look rather like misshapen kites.

CHAPTER III

THE KITES, BUZZARDS AND HARRIERS

BY an easy and natural ascent we pass from the Vultures to the Kite. This bird also prefers to be saved the trouble of catching its prey, but it has not fallen so far from the freebooting traditions of its stock as to relish the idea of sitting down upon a defunct cow for its meals. It turns its attention therefore to such corpses as may be carried away and consumed in private, to wit, rats, mice, small birds and even fishes. To find these it must sail at a lower level than the vulture, and it has no equal at that easy, undulating motion, which glides down a street, tops a house, dips into a lane, rounds a corner, all with same effortless grace. There is more steering required for these evolutions than for the circling of a vulture, hence the Kite carries an expansive, forked tail, a kind of twin helm, which it manages with a skill that is perfectly beautiful. All the while you may see its head turning this way and that, as it scans every corner with its keen eyes for any thing that may be "lifted." It does not insist that life shall be extinct. Any bird or little animal, which is sickly, wounded, or young enough to be picked off the ground with a swoop, is welcome. Chicks not over a month old are particularly eligible, as everybody knows to his sorrow who has tried to keep poultry in India. When a Kite becomes a confirmed chicken-eater there is nothing to be done but to shoot it, which is a pity, for they deserve to be protected. The quantity of dead rats, scraps of offal, and other refuse, which they remove

from our streets, and the precincts of our outhouses in the course of the year, must be enormous. The Crows offer their services for the same work, and I would not underrate their usefulness, but a Crow sitting down to breakfast on a dead bandicoot in the middle of the street is itself an offence. The Kite removes the nuisance, and what it does with it afterwards is no concern of ours.

We have two kinds of Kites in Bombay the Common (*Milvus govinda*) and the Brahminy (*Haliastur indus*), so called because it seems to be a bird of higher caste. It is smaller than the other and very much handsomer. Its head, neck and breast are pure white, while all the rest of the plumage is of a rich chestnut color. Young birds are of a more earthy hue and have not white heads, but even in that stage they can be distinguished at a glance from Common Kites by their tails, which are not forked, but rounded. For the avoidance of family brawls nature seems to have assigned separate portions to these two birds, giving the refuse of the land to the one and the refuse of the water to the other. It is not that one eats flesh and the other fish. Nothing that goes overboard from a ship comes amiss to the Brahminy, and the Common Kite will snatch fish from the very basket on a woman's head. But the one likes to pick its food off the water and the other off the ground. So the one haunts the harbor, while the other tales charge of the bazaar. I do not say that they never invade each other's preserves. Both build on trees about the beginning of the year, and generally lay two eggs, which are white, spotted with reddish-brown. The Common Kites go to Poona, with Government for the monsoon months. In Bombay then are always some that do not manage to get away, but down the coast I have looked in vain for a Common Kite from the beginning of June till the end of August. When thy return there is for some weeks, much squealing and quarrelling until the boundaries of each one's beat are fixed and the usurpations of crows and Brahminies repelled. The Brahminies do not go away they like water even in the form of rain.

The Buzzards and Harriers follow close upon the Kites. This is not exactly Jerdon's order, but one of my own which seems suited to that outside view of birds that we are taking. The Vultures and Kites are the jackals and hyenas of the bird world. The Buzzards and Barriers are a step higher. They like fresh meat and will have their prey alive, but, not possessing strength or speed to master any very noble quarry, they turn their attention chiefly to reptiles and creeping things. A Buzzard's idea of life is to sit upon a pole, or on the top of a small tree, commanding a good expanse of grassland, and to watch for a field mouse, or a lizard, or even a fat grasshopper. If you see a biggish, untidy hawk, of a sandy-brown color more or less dashed with whitish, spending the morning in this way, you may put it down as *Butastur teesa*, the White-eyed Buzzard often seen in Bombay. Even it is not common, except in famine years, for Bombay contains very little of that kind of grassy land which suits it. In the Deccan it is everywhere.

The Harrier is a more frequent visitor to our island, and it is not a bird that one can pass without wanting to know what it is. There is something stylish in the get-up of a Harrier, and also something unique. It is not like any other bird that you meet with on land. On the sea you may find something to compare with it, for widely as the anatomist is obliged

to separate them, I can imagine a classification in which the Barriers and the Gulls would form one family. They are wonderfully alike in the life that they lead and alike in the qualities which fit them for it. As the unwearied Gull ranges over the ocean and pounces on the careless fish, so the Harrier ranges from morning till night over hill and plain and drops on the unlucky young lark or incautious quail. If it alights, it alights on the ground, but the sole of this bird's foot does not seem to require much rest. Long-winged and light-bodied, it skims along the grass and skirts the bush, dips to the hollow and rises to the mound, as if it knew some charm to cancel the laws of gravitation. The sexes of the common Harrier are so unlike that no one who did not know would suspect their relationship. The male is like a Gull even in color, pale blue-gray on all the upper parts and white underneath. The female is a dark, umber-brown bird, mottled with reddish, the under parts being spotted or dashed with reddish on a white or pale ground. The lady is larger than her lord, as is the fashion among hawks. I am referring to the Common or Pale Barrier (*Circus macrurus*). Montagu's Harrier (*Circus cineraceus*) is very like it in both sexes on a passing view, and either species may be seen occasionally in Bombay, for they are very common all over India in the cold season. They arrive about October and depart in March or April to colder regions, where they will lay their eggs and bring up their young on the ground, strange hawks that they are.

These birds have a relation called the Marsh Harrier (*Circus aruginosus*), which leaves the dry land to them and devotes its energies to swamps, tanks and all shallow waters; a bird well cursed of sportsmen, for though its chief business is with frogs, it never refuses a wounded snipe or duck. What is almost more irritating is that, as it advances, slow-flapping, over rice-field or rushy marsh, every snipe takes wing. In the air they have no reason to fear it, but they will not risk being surprised among the grass. I am afraid that with the ordinary Bombay sportsman the Marsh Harrier generally passes for a Kite; but it is a smaller and altogether flimsier bird, and is also distinctly darker in color. Besides, the top of its head is usually white. Young birds, however, want this mark: they are dark-brown all over. In old age, again, the Marsh Harrier assumes a very handsome dress, in which nobody would recognize it for the same bird without an introduction. The shoulders, part of the wings, and the tail, are then of a fine, silvery, gray color, and the rest is dark brown, except the head, throat and breast, which are light-reddish. Birds in this plumage are rare, but once in a year or so I meet one. I well remember how the first puzzled me. Like its cousins, the Marsh Harrier is a winter visitant to this country, and in times now almost ancient, when the Flats were inundated every monsoon and did not dry for months after, it was very fond of Bombay. Things are changing sadly, but from Mahaluxmee station northwards and westwards there is still ground on which it can find a living.

CHAPTER IV

HAWKS, FALCONS AND EAGLES

The princes of the house of the birds of prey do not find much to tempt them to Bombay, with the exception of the Indian Sparrow Hawk, which will be wherever there are Sparrows. Not that sparrow meat is better than that of larks or bulbul, or other small

birds, but a community of sparrows, at ease in the established security of their urban life, offers rare chances to an assassin of the Sparrow Hawk's methods. It never pursues and rarely soars. Noiselessly it glides into your garden, and plunging into the middle of some thick tree, stands bolt upright, taking in the situation. If its arrival has been undetected, the chances are that a chirpy little company will be feeding in some open space, or better still, engaged in one of those social squabbles which occupy so much of every sparrow's time. Just when they are in the thickest of it, the enemy is in the midst of them, and has plunged its sharp talons into the nearest. A moment more and it is flying swiftly over the trees quite callous to the piteous streams of its captive, which will not last long. But happily for the little birds, the Sparrow Hawk does not always succeed in arriving undetected. Some lively bulbul, or wide-awake myna, catches sight of the detested shadow and gives a shrill cry of warning, and every little bird dives into the nearest bush, where it can dodge the enemy as a small boy dodges a big one round the dining table. It is remarkable that, though each species of bird has its own language, the warning signal of any one is understood by all. It is phonetic and needs no interpretation. I am often informed of the passage of a bird of prey overhead simply by hearing the cry of "Ware hawk" passed from bird to bird about me. The Sparrow Hawk is just about the length of a pigeon, but it is decidedly a smaller bird. There is more tail and less body. The color of the upper parts ranges from dusky-brown to slate-gray according to age; the under parts are whitish, spotted with brown, or, at a later age, closely barred with reddish fawn. The wings and tail are dusky-barred, and this is generally a conspicuous mark if the bird flies overhead. But to try to make out hawks by their color is at the best a short road to despair. Naturalists learn to recognize them as David's watchman recognized the courier who brought tidings of the victory over Absalom:--"His running is like the running of Ahimaaz, the son of Zadok." Every bird of prey has its own character, some trick of flight, some peculiarity of attitude when at rest, something in its figure and proportions, which serves to distinguish it decisively. The Sparrow Hawk flies with a few rapid strokes of the wings and then a gliding motion, and this together with its short, rounded wings and long tail, distinguishes it from any other common bird of prey. I learn of its presence oftener by the ear than the eye. Its sharp, impatient, double cry arrests attention among all other bird-voices. The Sparrow Hawk makes its nest in a tree in the hot season and lays three or four white eggs.

The Falcons have longer and more sharply pointed wings than the hawks and their flight is fierce and very swift. They resort to no surprises, like the Sparrow Hawk, but give chase to their prey in the open sky and fairly hunt it down. The Peregrine Falcon, which has a peculiar fondness for wild ducks, is not uncommon about the coast and doubtless often flies over Bombay, but there is only one species which really inhabits the island, and that is the Laggar Falcon (*Falco jugger*). It finds living cheap and good in our city, for it is partial to a diet of pigeons. A wild pigeon, pursued by one of these birds, once tumbled into my house in such a panic of fear that it almost allowed me to pick it up. Many years ago a pair of Laggars used to have their head-quarters, and perhaps their nest, at the University Tower, and I sometimes see one there still. They build in January or February, on large trees, cliffs, or high buildings, and lay three or four eggs so thickly spotted and blotched with reddish-brown that sometimes there is little of arty ground color visible.

There is one other Falcon which must be mentioned, namely, the Kestril, which is very common all India in the cold season and will be met with wherever there is open, grassy ground, like the Bombay Flats. It is about the size of the Sparrow Hawk and more easily recognized than most hawks by its color. The back and wings are chestnut, or almost brick red, but the quills are black and the tail is gray. The contrast is striking and unmistakable. The under parts are light-buffy, spotted with brown. The Kestril is also distinguished by its peculiar habit of hovering in air when looking for its prey of grasshoppers, lizards, mice and larks. The Duke of Argyll has devoted three pages of "The Reign of Law." to an exposition of this performance. A few pairs of Kestrils seem to spend the year in India, making their nests on high cliffs on the mountains, but the majority of those which we see in the cold season are tourists. In Barnes's book the Kestril appears as *Cerchneis tinnunculus*, but I am glad to see that Mr. Blanford has restored Jerdon's name, *Tinnuculus alaudarius*.

To the lay mind the word Eagle conveys the idea of a royal bird of gigantic size and noble aspect, which has its eyrie on some inaccessible mountain cliff, from which it descends to carry off lambs and occasionally babies. This is the Eagle of the poets:

He clasps the crag with hooked hands,

Close to the Sun in Lonely Lands,

Ringed with the azure world he stands.

The wrinkled sea beneath him crawls,

He watches from his mountain walls

And Like a thunderbolt he falls.

I need scarcely say that the naturalist classes a good many birds as Eagles, which are not quite so grand. But even the least noble of them requires more than Bombay can afford. The handsome Crested Hawk- eagle, so common in the surrounding districts, may I need scarcely say that the naturalist many birds as Eagles, which are, not visit us sometimes, but I have not seen it. There is one, however, which we may fairly claim, and to my thinking it is one of the very noblest of the race. I mean the Sea Eagle (*Haliaetus leucogaster*). It is exceedingly common on this west coast, and I know of at least one eyrie not ten miles from Bombay, so the sea on both sides of our island is well within its range. It needs little description to make it recognizable. Though smaller than a vulture, it is larger than any other bird of prey that comes our way. Viewed from below the whole bird is snowy-white, with the exception of broad black border on the wings and the tail. Its back and upper parts of the wings are of a fine slate- gray color. But further even than you can make out its colors you may know the Sea Eagle by its flight. When it sails, as it does most majestically, it does not carry its wings horizontally, like kite or vulture, but inclined upwards, so that the figure of the whole bird is like a very flat V. The sea Eagle lives chiefly on sea serpents. They are forced to come to the surface frequently to breathe

and are more easily caught than fishes, they are all venomous, but the Eagle does not mind that. The fact is that a sea snake is so utterly helpless out of water that, when clutched by the middle and borne away through the air, it can do nothing but dangle like a string. The Sea Eagle makes an enormous nest of sticks in a tree and uses it year after year, till all the ground under it is thickly sown with the bones of snakes and fishes. On the mainland the tree selected is generally a very- high one, but on small, solitary islands 1 have seen nests scarcely fifteen feet from the ground. About November two eggs are laid, of a greenish-white color, and as the young ones grow up there is great ado about satisfying their voracious appetites. In a nest I visited one January, with only a single young one, I found a fresh fish 9 or 10 inches long and a half-eaten snake. For months after they leave the nest the young follow their parents about, crying, lilt: the daughters of the horseleach, "Give, give." and the loud and harsh *kak, kak, kak* from which the bird gets its native name *Kakan*, may be heard all day.

Another water bird must come in here, though the latest investigations into its inside seem to convict it of being half an owl. I mean the Osprey, or Fish Hawk (*Pondion halitaeus*). It is not a resident with us, but comes for the cold season, when it may be seen all along the seacoast and on every large river. The Osprey is an exceedingly handsome bird in the hand, but when seen at a distance it has nothing of the imposing aspect of the Sea Eagle. In fact, one who has not been accustomed to notice birds may easily pass it by as some vulgar fowl of the kite sort. In the Ratnagiri district I have seldom met a native who could give me a name for it. Yet the Osprey, when once you know it, is not to be confounded with anything else. There it sits on the point of a fishing stake, a dark-brown bird with a white cap, the breast and under parts also white, but interrupted by a necklace of brown beads; there is nothing else like it. And when it dies it is equally peculiar: its wings are very long, and it beats the air rapidly with the points of them. And if you are still in doubt, the matter is settled when it suddenly closes its wings and from a height to forty or fifty feet falls headlong into the water. That is one of the finest sights I know. With a tremendous splash the sea receives the bird and closes over it, and a ring of expanding waves starts from the spot where it perished. But a second later it reappears, and, lifting itself and a great fish out of the heaving water, shakes the drops off its shoulders with a peculiar shrug and flies to a favorite rock, white with the remains of many fish dinners. This is a marvelous feat, especially when you remember that, like all birds of prey, the Osprey strikes with its feet and not with its beak. The fishes, which it catches, are sometimes so heavy that it can scarcely carry them to the nearest land. It is often pursued and forced to deliver up its well-earned booty by its more powerful, but less plucky and skilful neighbor, the Sea Eagle. I have said that the Osprey is a cold season visitant. I have myself seen one, however, in the month of August, and I suspect that a few pairs remain and rear their young on this coast.

CHAPTER V

OWLS

OWLS were classed by Cuvier with eagles, hawks and vultures, and Jerdon followed him, as all the old naturalists did. More careful examination of their anatomy has shown

that they differ widely from all other birds of prey in many respects, and resemble parrots: so they are now placed by most in an order by themselves, midway between the hawks and the parrots. The outward and visible characteristics of this order are a short, parrot-like beak, the outer toe reversible (in parrots it is permanently reversed), and very large eyes directed forwards, and uncommonly well and developed ears. They make their nests in holes and lay white eggs like parrots. Their plumage is peculiarly soft, even the quills, so that they fly noiselessly. If you want more, I may tell you that there is no ambiens muscle, but basypterygoid processes are present. On the other hand, the accessory femoro-caudal and the semitendinosus and the accessory semitendinosus are wanting. Now all this is very important and not to be laughed at. These solemn words were not invented only to bamboozle the unlearned, but represent facts in the plan on which the frame of an owl is constructed. And the question on which these facts bear is more than curious. Expressed in popular language the question is this. Is the owl only a weak-eyed hawk that cannot bear the light of day, or is it a bold and bad parrot, which has taken to night-walking and murder! There is a great parrot in Australia, which has taken, within recent years, to the extremely reprehensible practice of killing sheep by fastening on them and tearing out their livers. However, all such questions, fascinating though they be, are outside of our present scope. We are concerned with the outward aspect and habits of the two or three kinds of owls, which are domiciled in Bombay.

The Screech Owl is more common in our island than in any other part of India with which I am acquainted. This statement may surprise people who have lived for twenty years in Bombay without seeing one, but the Screech Owl does not ordinarily put itself much in the way of being seen. A dark object, like a Flying Fox, passing overhead as you drive home from dinner, and a loud, harsh, husky screech, suggesting sore throat and loss of voice, are all the indications you will commonly have of its presence. But should a pair take up their residence in any deserted building, or old ruin, in your neighborhood, then you will know more about them. I often wonder what the Screech Owls did before man was created, for they cannot get on without him now. If he did not build churches with steeples and belfries, and forts and castles with towers, and barns with roomy lofts, where would they live! In this Presidency they are under deepest obligations to the Portuguese. Under one of the remaining walls of an ecclesiastical ruin in Bassein Fort, Mr. Phipson and I once noticed the ground glittering with small white bones. We gathered a handful of them and brought them home for examination, and could scarcely believe in ourselves or each other when they proved to consist chiefly of the jaw-bones of muskrats! In a high niche of that old wall a worthy pair of Screech Owls had, for who knows how many years, brought up an annual family of 3, 4, or 6 insatiable owlets on this nutritious food, varied only with an occasional house rat or field mouse. As is well known, owls swallow their prey whole, and after digesting all that is digestible, throw up the bones and hair rolled up into little balls. Why the bones we found were chiefly jaw-bones I cannot tell, unless the parent birds were in the habit of snipping off the heads of little animals as delicacies for their off-spring and consuming the bodies themselves.

I need not describe the Screech Owl. It is just the same bird as from yonder ivy-mantled tower.

"Does to the moon complain
Of such as, wandering near her secret bower,
Molest her ancient, solitary reign."

Specimens from different parts of the world do indeed differ a little, and Jerdon described the Indian bird as a distinct species under the name *Strix javanica*, but in the Fauna of British India, as I am glad to see, it appears under the name given by Linnaeus to the Barn Owl of Europe, *Strix flammea* our second owl is a very different character. Repudiating all the austere, exclusive and mystical ways of its race, and encumbered with no superfluous solemnity, the Spotted Owlet (*Carine brama*) makes itself one of the most familiar objects of Indian life. It does not wait for the darkness of night, but appears before the sun has fairly set, and occasionally gives us a look even in the middle of the day. Who does not know the little Punchinello,: its unfailing vivacity, its inimitable drolleries, and the volubility of its eloquence. Often, sitting at the door of my tent at dusk and listening to that torrent of squeak and gibber and chatter, I have wearied myself with surmising what could be the meaning of it all. It seems to be conventional or controversial, for there are always two engaged in it and both speak at once. Perhaps it is a domestic quarrel, but the character of the Spotted Owlet almost forbids that idea. He is truly in the language of the tombstones, an affectionate husband and fond father. Rarely will you see him twenty yards from his spouse. If she flies across the garden to another tree, he waits a few seconds, then flies across too and sits by her side. And never will you see a third in the party, except it be their own olive branches, of which there may be four. These appear about April, and are the drollest little beings imaginable. They all live happily together in a hole in some old tree, and if you tap the tree at any hour of the day, a puzzled, round face will appear at the hole and ask more plainly than in words what you want. Then the owner of the face will dart out and sit on a branch and begin bowing to you with sarcastic effect. A hole in the roof of the house, or anywhere else, will do as well as one in a tree, if it is roomy and comfortable. The Owlet is very promiscuous in its diet. I have seen it hawking trying ants from its perch on a telegraph wire, darting out after them and catching them in its feet, and if a mouse or a lizard goes by, it will treat that in the same way. Mr. Stuart Baker says that it kills little bats, not catching them on the wing, but pulling them out of their hiding places.

Besides these two species it is not unlikely that the great horned Fish Owl (*Ketupa zeylonensis*) may be seen, in Bombay about such places as Worlee or Sion, but I have never met with it. It is called the Fish Owl because it is generally found near water and is supposed to feed principally on fish and frogs and crabs, but I have seen one stoop on a hare. It had actually clutched the hare when my appearance diverted it. It has a ghostly hoot a *hoo, hoo-hoo*, far-reaching but coming from nowhere in particular. When it sits on the top of a native house, uttering this dismal sound, the devil is walking about inside, marking somebody for death. I know this, because, the Hamal told me.

CHAPTER VI

THE SWALLOWS AND SWIFTS

WE have done with the Birds of Prey now, and come to Cuvier's second order viz. the Insessores or Perching Birds, which includes more than two-thirds of all creatures that go clad in feathers. All "common or garden" birds belong to this order; fowls and turkeys and ducks and waterfowl are excluded from it. Jerdon divides it into certain tribes according to the form of the beak.

Each Tribe is again divided into Families and sub-families, with which, however, we need not trouble ourselves here. The first Tribe is the Fissirostres, or gape-mouthed birds. They are rather a heterogeneous lot, unlike in many points, but they have one family bond, namely, a mouth that gapes from ear to ear and gives them a peculiar facility in gulping down the flies and flying insects on which they all feed. First among them come the Swallows and Swifts, to which I will devote this paper. I am afraid that the distinction between a Swallow and a Swift is not generally present to the popular mind: but they are separated by very radical differences, of which, however, I need mention only those that are most obvious outwardly. One is that in the foot of a Swift all the four toes are turned forwards. It is, in fact, like a human hand without a thumb. Now observe the consequences. Such a foot cannot grasp, *ergo* a Swift cannot perch, *ergo* a twig or a telegraph wire offers it no resting place. If it gets tired it must go to bed. But a bird that lives on the midges in the air cannot afford to stay by its bedside. It must range far and wide. So it cannot afford to get tired. Therefore a Swift learns to spend the Right in its nest and the day on its wings. Wonderful wings they need to be and are. They are so long that, when closed, they extend far beyond the tail, and they are worked quite differently from the wings of even Swallow. As a Swallow darts along, its wings almost close against its sides at every stroke, and it looks like a pair of scissors opening and shutting. Now a Swift never closes its wings in this way. It whips the air rapidly with the points of them, but they are always extended and evenly curved from tip to tip, like a bow, the slim body of the bird being the arrow. I have dwelt on this at some length because it is by far the plainest outward difference between a Swift and a Swallow.

I reckon that two Swifts and at least four Swallows may be included among the Common Birds of Bombay. First comes our own familiar English Swallow (*Hirundo rustica*), which spends the winter with us and the summer with our families; at least, it is pleasant to fancy so, though I am afraid that the line of migration does not lie exactly from England to India. However that may be, passengers on their way home in the month of May are often joined in the Red Sea, or the Mediterranean, by a Swallow traveling the same way, which spends a night perhaps in the rigging, then tires of such sluggish progress and goes on alone. It returns to India in September or October, and is tolerably common in Bombay in the cold season. I need not describe it.

Another purely Indian species, sufficiently like the English bird to be mistaken for it by a careless observer, is the Wire-tail Swallow (*Hirundo filifera*) which is also found in Bombay and loves to course up and down wet, grassy ditches. It is a splendid bird. The upper parts are dark, glossy, "steel blue." gleaming in the sun, the top of the head is rich, rusty red, and the under parts are as white as a shirt front fresh from the *dhobie*--I mean

from a laundry. But its most distinctive mark is the tail, which is not long and forked, like the tail of the English Swallow but short and almost square, with the outermost feather on each side prolonged for four or five inches and as thin as a fine wire. This bird makes its "clay built nest" in the hot season, or the beginning of the monsoon, not so often about the dwellings of man as about his other works, bridges, for example, and wells, and especially road culverts. It likes to be near water. It usually lays three prettily speckled eggs.

But by far the commonest of the whole family in this Residency is the Red-backed Swallow (*Hirundo erythropygia*; Jerdon calls it *daurica*). It is especially abundant about hilly or rocky country. Just at the beginning of the cold season, ill the morning, one comes upon them in some places in such numbers that the air feels overcrowded and they jostle each other on the telegraph wires. The upper parts of the Red- backed Swallow, including the wings and tail, are black, excepting only the sides of the head and the "small" of the back, which are light, rusty red. The under parts are white. The whole bird, especially when young, looks dingy by comparison with the Wire-tail. The tail is deeply forked. This species also builds a mud nest in the hot season, under some bridge or overhanging rock, or a ledge in any building not regularly inhabited: but its architecture is eccentric. The egg chamber is globular, and the entrance to it is by a neck as long as the bird has leisure to make it. Barnes says that the bird goes on lengthening the neck after the eggs are laid. There are usually three white eggs.

Our fourth swallow is the Dusky Crag Martin. Jerdon called it *Cotyle concolor* but that has-been improved upon, and it appears in Barnes as *Plyonoprogne concolor*. The first word ought to be hooted down, but *concolor* is good, for the bird is of one color, and that is the color of smoke. There is a little, round, white spot on each feather of the tail, but this is hardly noticeable. The Crag Martin loves rocks and makes its nest on them, under some overhanging ledge; the material is of course mud, with feathers for a warm lining. The season is either just before or just after the monsoon, and it lays three or four white eggs, speckled with brown. It is common about Malabar Hill and spends much of its time Eying up and down the face of tile cliffs under The Ridge. It is not remarkable for swiftness or grace of flight. In fact I should not say that it was remarkable for anything. It is a commonplace bird.

But the most abundant and familiar of this whole family in Bombay itself is the Palm Swift (*Cypselus bataassiensis*), which in other parts of the Presidency is a very rare bird. The reason may be found in its name. It cannot live without palm trees. Any palm will not do; it requires the Brab, or Tar, palm; for it cannot think of any situation for its nest except one of the wrinkles on the underside of the broad leaf of this tree. I have indeed seen a pair trying to accommodate themselves about a cocoanut tree, but they were in difficulties. As may be inferred, the Palm Swift is a bird of small intellect, a feeble creature indeed in all respects. Even its Eight is feeble for a Swift, and it seldom wanders far from home. Consequently it is art unknown bird in the Deccan generally and in large tracts of the Konkan, and if ever you do see it you may safely lay odds that there is a Brab palm within a mile of you. I have tested this. In Bombay the Brab is one of the commonest trees, and therefore the Palm Swift is one of the commonest birds. It is a slim

bird, with long, narrow wings and a thin, deeply forked tail, which opens out whenever the bird turns suddenly in the air. Its color is a brownish-smokey, rather lighter on the under parts. As I have said, its flight is comparatively feeble, but it is a true Swift, spending the whole day on the wing without apparent effort, and flying much higher than the Swallows generally do. Its nest is a small, shallow cup, made of feathers worked up with a whitish substance like *isin*-glass, which is really the saliva of the bird. All Swifts use this substance in the construction of their nests and some use little else, producing those clear, semi-transparent, white structures, which the heathen Chinee converts into toothsome soups. The Palm Swift lays three white eggs, which may be looked for in the hot season. You must secure the assistance of a teddy-drawer to obtain them.

The Common Indian Swift, (*Cypselus affinis*) as Jerdon calls our sixth species of this family, might rather be named the House Swift, for it comes nearer taking the place which the House Swallow fills in England than any other. It does not often build under the eaves of a private house, but the arched entrance to Messrs. Greaves, Cotton & Co.'s offices, the central hall of the Post Office, the porch of the old High Court, in short, any spacious porch, or verandah, or high-arched doorway, will do. The Indian House Swift is a sociable bird and will not build alone, but founds regular villages, which may consist of half a dozen nests or half a hundred. They are large and solid, generally clustered together, and so stuck over with feathers on the outside that they look like one great, fluffy mass; but each of them has its own private entrance at the side. These are not only cradles for eggs and young, but dwellings, in which the birds live all the year round. Regularly every evening the community gathers together, and after spending some time in playful evolutions in the air, as Jerdon says, "with much fluttering of their wings and a good deal of twittering talk," one after another swoops, with a "shivering scream," and pops into its bed. When there are young to be fed (which may be at any season, for they seem to have several broods in the year), the parent birds are coming and going all the day. Only two or three eggs are laid at a time, which are white, like the eggs of all Swifts. The Common Indian Swift is a black, or blackish, bird, with the chin and the small of the back pure white, so it need not be mistaken for any other bird. Its tail is short and square.

I have seen other Swifts and Swallows in Bombay. Of the Cliff Swallow (*Hirundo fluvicola*) I am certain, and I think I have seen a Crag Martin about Malabar Hill, which was larger and paler than the common one. Then there is that grand bird, the Alpine Swift (*Cypselus melba*), which I have shot within a few miles of Bombay. But a bird that gets up before daylight and goes to bed long after dark and dies all day at a hundred miles an hour may be seen anywhere.

CHAPTER VII

THE NIGHTJARS, BEE-EATERS AND KINGFISHERS

How shall I describe a Goatsucker? If you are walking by day in scrubby ground you are some still unreclaimed part, say, of Cumballa Hill and a brownish bird starts from under a bush at your foot and dies, with jerky strokes of its very long wings, for a distance of

twenty or thirty yards, and then drops under a bush again, it is a Goatsucker. You have disturbed it in its sleep. Or after sunset, in the dusk of the evening, you may come upon it sitting in the dust, right in the middle of the road, in some unfrequented neighborhood. It will jump up suddenly as often as you approach it, and fly before you for a little distance, then drop into the middle of the road again and squat, looking just like a large frog, or toad, dimly seen. This is how it spends the night, or rather, I should say, the times of dusk and dawn, for I believe it sleeps at midnight. At intervals it springs up and takes a circuit, performing somersaults and other antics in the air. It is catching moths or beetles.

Sometimes it perches on a bough of a low tree, not across it, as any other bird would, but along it. Such is a Goatsucker in the bush. In the hand it is a weird thing, with a flat head and very large, lustrous, dark eyes, like those of the heroine in a penny dreadful. Its feet are small and its bill is a mere apology, but its head is almost split in two by the width of its gape. Its soft plumage is very beautiful, but hardly describable. It consists of earthy and ashy and reddish shades, mottled, barred, or curiously penciled with darker tints.

This bird is called a Goatsucker from its wicked habit of milking domestic goats. In modern books of Natural History you will find this habit denied and the bird called a Nightjar, but they cannot get rid of its Latin name, *Caprimulgus*, with which it has been branded from the days of Pliny. The Goatsuckers, or Nightjars, belong, of course, to the Tribe Fissirostres. There are half-a-dozen species of them in India, of which one occurs in Bombay. I have only caught occasional glimpses of it, but it can be no other than *Caprimulgus asiaticus*, the Common Indian Nightjar. Its voice is a strange sound and has been compared to a small stone skimming along on ice. All the members of this family lay their eggs, only two, on the bare ground, in the hot season. They are of a pale salmon, or stone color, patched and blurred with purplish brown.

The next family of the Fissirostres contains the Bee-eaters. Everybody knows the little grass-green bird, with a long bill and two long, thin feathers, out growing the rest of its tail by a couple of inches, which sits on a twig, or telegraph wire, and darts after passing flies; but I have met many who did not know what to call it. It is the common Indian Bee-eater (*Merops viridis*). In Bombay it is to be seen everywhere from the end of the rains till the beginning of the hot season, but disappears in the interval. Yet it is not ranked as a migratory bird, and it is not so in the usual sense. It only leaves us during the breeding season, because it cannot find comfortable family quarters in our island. It makes its nest in a burrow, as long as a man's arm, which it digs for itself. Its only pickaxe is its own slender beak, so it seeks some riverbank, or similar situation, where the soil is soft. At such a place hundreds of them will congregate and bring up their young in company. That business over, they disperse again and pursue their useful mission of keeping down the flies; for though they are certainly fond of bees, they do not confine themselves to that diet. The little Bee-eater has always been a favorite of mine. Wherever and whenever you meet it, it looks bright, happy, and sociable and good-humored. No one ever saw Bee-eaters quarrelling. Indeed, they appear to be so pleased with each other's society that they always sleep together, hundreds sometimes in one tree. They are very particular about their personal appearance, taking a dust bath frequently in the middle of the road, and trimming their feathers with care. And they have a personal appearance worth paying attention to. The general color is a vivid green, but the effect is heightened by the most

tasteful little touches of other hues. The back of the head and neck are reddish golden, and there is an expressive black stripe across the eye. The chin and throat are of a fine verdigris green, bordered by a demi-collar of black. The quill feathers are reddish, and each one is tipped with black; the effect of this is very fine when the wing is stretched out in the sunlight.

Another species, which Jerdon calls The Blue-tailed Bee-eater (*Merops philipensis*), is pretty common at some places on the coast, and I have seen it in Bombay. It is a larger bird than the common kind and darker in color.

The last family of the gape-mouthed birds with which we have to do comprises the Kingfishers, of which we have two species, perhaps I should say three. The White-breasted Kingfisher (*Halcyon smyrnensis*), most gorgeous of all Bombay birds, is, I hope, familiar to everybody. No habit of observation is required for noticing it; it compels notice. Its beak is coral red and three inches long, its shirt front spotless white, its vest and also its whole head and neck rich chestnut brown, its shoulders glossy black, and the rest of its wings, back and tail, brilliant blue. When it flies, a broad white band opens on its wings. The White-breasted Kingfisher is a bird of gardens and hence fond of Bombay. Wherever there is anything like a tank, or pond, or even a shallow well with a tree overhanging the water, there you will find it. It will even visit a garden tub and enjoy a plunge bath. The two conditions it asks for are shade and water. Doubtless it enjoys these itself, but that is a secondary reason for its seeking them. The primary reason is that little frogs enjoy them and it enjoys little frogs, for, though a member of a fishing caste, it is itself but a poor fisher. It is happily not fastidious. Water insects, crabs, anything in short that it can catch and swallow, is welcome. A friend of mine introduced one into an immense aviary, in which he kept a great variety of small birds, and forthwith the little amadavats began to disappear rapidly and mysteriously. He caught the culprit at last *in flagrante delicto* and ejected it. The White-breasted Kingfisher lays five or six pure white eggs, during the hot season, in a hole in a bank, or in the side of a well. This bird has not a musical voice: few brilliant birds have. Its commonest cry is a rattling scream, which it utters when flying; but it has also a shrill, plaintive call, which seems to relieve the monotony of sitting alone, watching for fishes.

A far cleverer fisher is the little bird which Jerdon calls the Common Indian Kingfisher (*Alcedo bengalensis*)," but which is now admitted to be identical with the only Kingfisher found in England. It used to be regarded as a distinct species, chiefly because it grows to a larger size in a cold climate; but so does man. It is a little bird, about the size of a sparrow, which sits on twigs, or stones, beside all waters, pointing its long, sharp, black beak this way and that way, as it scans the pools, and jerking its pert little tail. When it sees a chance, it takes it instantly, popping obliquely into the water and snapping up the fish with its little forceps in a trice. When it emerges, the fish is across its beak, in which position it cannot be swallowed; so the bird alights on a stone and knocks the slippery morsel about in a business-like way until it gets hold of it endways with the head pointing throat wards. Then the fish disappears suddenly. The Common Kingfisher lives almost exclusively on fishes from one to two inches in length, and whenever these are to be found you will find it. There are usually a pair together, which have their own preserves

and drive off every intruder. They fly from pool to peal, straight and swiftly, just above the surface of the water, answering to each other in shrill chirps. They lay five, six, or seven eggs, in a hole in a bank, which they dig for themselves. From March till June is the season. The Common Kingfisher is a lovely bird, though less dazzling than the last species. The head is dusky, speckled with blue, the rest of the upper parts are Blue, or greenish blue, brightest on the back, and the whole of the under parts are the color of bright rust. There is a striking crescent-shaped patch of pure white on each side of the neck.

I said that perhaps a third species might be included among the Common Birds of Bombay. I meant the beautiful speckled bird Jerdon's Pied Kingfisher (*Ceryle rudis*), which is so common on the Poona river and on all rivers and large tanks and backwaters. I have seen a pair of them fishing 04 some flooded ground near Dadar station. This is the cleverest fisher of the whole tribe. It will not work from a perch, but hovers like a Kestrel, ten or fifteen feet above the water, with its long bill pointed downwards, and drops perpendicularly on its prey. Jerdon says that he never saw one plunge into the water and come out without a fish. They always hunt in pairs, cheering each other with shrill cries, and stopping now and then to rest on a wall and get their breath. Like the rest, they lay their eggs in holes from February to April.

CHAPTER VIII

THE PARROTS

Tap second tribe of the Scansores or Climbers, which comprise the Parrots, Woodpeckers, and Cuckoos. In all these the outer toe of each foot is turned back, so that two toes point forwards and two backwards. This arrangement gives the foot a peculiarly firm grasp, and leads to difference in gait, which every one has noticed who ever kept a Parrot. The Parrot does not sit upright and hop from perch to perch, as a canary does; it clammers about the cage hand over hand, or rather, foot over foot; thence the name Climbers. Except this peculiarity in the form of the foot, Parrots have little in common with Woodpeckers or Cuckoos, and in all modern systems they are widely separated, being, as I have already said, ranked in an order by themselves and placed near the Owls. They have proportionally a larger brain than almost any other birds, and the tongue, which is thick and fleshy, is endowed with a very discriminating sense of taste. They have also, as a rule, a fine ear. The short, curved, bill is partly covered with a cere of bare skin, a feature in which they resemble the birds of prey.

India possesses a good many representatives of the family, but, with a single exception, they all belong to one division of it, namely, the Parakeets, which are green birds of moderate size, with long tails. Cockatoos, Macaws, true Parrots, Lories, are all absent from India. And of the Parakeets, only one, the Rose-ringed, or Common Parakeet makes its home in Bombay. I was once told by a gentleman, whose memory must have gone back to the early fifties, that even this was a recent settler. He said that when he came to Bombay them were no Parrots. Statements of this kind, except from very careful observers, must be received with caution but it is not impossible that the wild Parrots,

which now swarm about Malabar Hill, are for the most part descendants of escaped prisoners. For Bombay has long been a veritable Botany Bay to this persecuted race. Hundreds upon hundreds every season are drafted from the mainland to the great slave mart in the Crawford Market, crowded together in dark and noisome baskets, like slaves in a dhow. Thence they find their way to every lane and alley in the native town, where they spend the short remainder of their days in little iron and tin prisons with a cold, cutting wire to perch on, and nothing to do. Happily, a great many escape through the carelessness of their keepers, and, though the short, ragged tail, dirty plumage, and uneasy manner, betray them for a time, they soon adapt themselves again to wild life.

This bird scarcely needs description. The female is green all over, while the male has a rose collar and black necktie. The beak is coral red. The scientific name of this species is *Palaornis torquatus*. There is a much larger bird, *Palarornis eupatria*, called by Jerdon the Alexandrine Parakeet, because it is the kind which Alexander the Great is supposed to have taken back with him from India. It is much the same in color, except that the male has a patch of red on each wing and all the tints are coarser. It learns to speak better than the common one, and a good many are kept in Bombay as pets. Of course they escape too, but they have never effected a settlement in the island. Then there is the lovely little Rose-headed, or, as, Blanford aptly names it, Blossom-headed Parakeet (*P. rosa*). The whole head of the male is rosy, that of the female plum-blue, and the beak in both sexes is slight yellow. These are also on sale in the Crawford Market in hundreds and I do not know why one never sees them wild in Bombay. But the little Blossom-head is nowhere a garden bird. It swarms on the coast, ravaging the cornfields, in spite of little boys on *mutchans* slinging atones and hurling anathemas. All the Parr3.keets lay white eggs; usually tour, in a hole, about the beginning of the year. A hole in either a tree or a wall will do; and I have seen a pair prospecting a little architectural orifice in the dome of the Mahaluxmee temple. I said that, with one exception, the Parrots of India belonged to the group distinguished as Parakeets. The exception is the Indian Lorikeet (*Loriculus vernalis*), that quaint little grass-green bird, with crimson back and blue throat, about the size of a sparrow, which is, offered for sale in pairs under the name of Lovebird. It lives on plantains and soft fruits, and sleeps hanging by its feet from the top of its cage. This is one of the birds of Bombay, though I daresay few know it. It dies very swiftly, and when it alights among foliage as green as itself, it is practically invisible; so it escapes observation: but its sharp, triple chirp, always uttered when flying, may be heard about the lower road to Malabar Point.

CHAPTER IX

THE CUCKOOS

Cuckoo is properly the name of a particular migratory bird, which spends the spring and summer in Europe and the winter in warmer latitudes (India, for example), and is notorious for shirking its parental responsibilities and foisting its offspring upon other birds to bring up. But the name is applied to whole group birds, which resemble the European Cuckoo in structure and have the same disreputable habit. There are many species of the family in India, and all, like the home bird, are better known to the ear than

the eye. The most familiar of them all is the Koel (*Eudynamys orientalis*, or *honorata*). It is a great black fowl almost as Large as a crow, with a much longer tail and a green bill. That is the male. The female is of a dark-greenish dusky hue, spotted and banded with white. But the Keel is seldom seen. It is-

No bird, but an invisible thing,

A voice, a mystery.

Early in the morning, through the hottest hours of the day, late in the evening sometimes in the dead of night, its loud and mellow voice calls to us in a rising crescendo, "Who-be-you! Who-be-you! Who-be-you!" And we call it the Brain-fever Bird. We are strange and whimsical creatures. An old English poet complains—

For here hath ben the Leud cuckow

I pray to God will fire her bren.

But the fashion has changed now, and the leud cuckow has become a favorite of the poets. It is the "darling of the spring," a "blessed bird," and its note is a "mellow May song, clear and loud." Meanwhile its own cousin in India is the Brain Fever Bird. Yet the Koel also is a darling of the spring. It does not altogether leave us in winter, but at that season, it is silent. As the weather grows warm it begins to utter its joyful note, and its spirits rise with the temperature; in May it cannot contain itself at any hour of the twenty-four. One is prompted to ask, "What is all the excitement about?" That is easily answered. In May the crows are busy building their nests, and it is to them that the Koel intends to commit the care of its offspring. The crows seem to have a shrewd suspicion that they are played upon in some way by the Keel, and they never see the bird without mobbing him, but he dives into some thick tree with loud screams, and dodges them among the foliage, while the silent and insidious hell Keel takes advantage of their absence to drop an egg or two into their nests. Crows cannot count above three at the most, and the new egg is not unlike their own, so they never discover the trick, and when the young bird grows up and develops its long tail, they are guile proud of it. Only yesterday I saw a pair of crows fondly feeding a clamorous young Koel, together with its foster brother, their own child. It was hungry and clamorous too, but the Keel appeared to be the favorite with the parents. The European Cuckoo coolly ejects the rightful occupants of the nest and takes their inheritance. The young Koel is not so base.

There is another Cuckoo, whose voice is more de- pressing to me than that of the Koel, and it is more persistent; at least, it cries more in the night. Latin name *Cacomantis passerinus* (in Jerdon, *Polyphasia nigra*), is particularly happy. Jerdon calls it the Plaintive Cuckoo, and likens its cry to the syllables, *Kaveer, Kaveer, Kaveer*. It is also black, or dark ashy, and long-tailed like the Keel, but it is a little bird. Its eggs have been found in the nests of wren-warblers, bulbul, and other small birds. It is seldom seen.

Neither of these two Cuckoos is nearly so common in Bombay as on the mainland. But

there is another species, which appears to prefer our island to any other part of India. This is the Pied-Crested Cuckoo (*Coccycutes jacobinus*), a very handsome bird, much like a magpie in color, but smaller and slighter in build. The under-parts and a bar across the wings are pure white, all the rest of it is glossy black, and an elegant, pointed crest gives style to its head. It has a loud, clear, excited cry, but is not so addicted to needless reiteration as the last two. The crows appear to be under some misapprehension with regard to this bird, and persecute it even more savagely than the Koel. Almost every specimen I have had in my hands has been rescued from an avenging mob of crows when it had no strength to go further. There is no ground, as far as I know, for their hatred, for this species does not interfere with their domestic life, but commits its offspring to the Seven Brothers. The pied youngster grows up as one of the brotherhood, and is treated brotherly, but its wild gypsy nature is stronger than habit and it leaves them as soon as it is able to take care of itself. That great awkward, black bird, with reddish chestnut wings and a long tail, which is known by various nicknames, such as Crow Pheasant, or Jungle Cock, is classed among the Cuckoos, though it does not lay its eggs in the nests of other birds, but makes one for itself and brings up its own family respectably. It is the Coucal, *Centropus rufipennis*. It is hardly a common Bombay bird, but it is very common in the surrounding country and has been seen, I think, within municipal limits.

CHAPTER X

THE WOODPECKER AND THE COPPERSMITH

I HAVE met with only one species of Woodpecker in Bombay, but it is fairly common. To give a description of its colors by which one who did not know it would be likely to recognize it, is not easy: but anybody who has once seen Wood-pecker will know it again, for there is no other bird like it. It does not perch along the branches of a tree, like the other fowls of the air, but runs up the trunk and boughs like a squirrel, clinging with its strong claws and propping itself up with its short, stiff tail. Its head, set crosswise on the thin, supple neck looks like the hammer of a gun, and it stops at intervals to hammer fiercely at the trunk of the tree. Its blows are delivered with extraordinary rapidity and energy; indeed, all its actions are impulsive and hasty. The Woodpecker's trade is a curious one. While other birds are hunting for all sorts of insects that fly in the air, or crawl on the ground, or hide among the leaves of trees, it lays siege to those which fancy they have defied their enemies by burrowing into the solid trunk. Its beak is a regular chisel, square at the point, with an edge kept always sharp, on what grind-stone, I know riot. Its tongue, which can be thrust out for a distance of three or four inches, is armed at the point with strong and sharp hooks, and also smeared, I think, with birdlime, so that it forms at once a very searching and a fast holding instrument. I remember once watching a pair of Woodpeckers, which had discovered the burrow of some fat timber grub and were determined to have it out. They first thrust their bills in at the entrance, but evidently the occupant had retired beyond the reach of their tongues. Then they tried to tap the burrow some inches further down. For a quarter of an hour they hammered away with almost painful energy, but the wood proved to be perfectly sound and, very hard. Then they tried another point and another, returning every now and then to the orifice to thrust in their tongues and take the exact direction of the hole. At last their patience or

their strength, wore out, and, with a cry of impatience, they darted off in quest of something more promising.

Our one Woodpecker is a little bird, scarcely bigger than a bulbul, but more stoutly built. It is the Yellow-fronted Woodpecker of Jerdon (*Picus maharattensis*), a striking and beautifully colored bird. The head is bright yellowish brown, or brownish yellow, the crown of the male being adorned with a scarlet crest. The throat is white and so are the sides of the face and neck. This gives a peculiar piquancy to the sharp countenance of the keen little bird. The shoulders, wings, and tail are black, speckled with white, but the lower part of the back is pure white. It wears a "stomacher" of bright scarlet, but this you will not see unless you have the bird in your hand. Like most of its kind, it generally goes in pairs, one following the other from tree to tree, with short, sharp, impatient cries. They lay their eggs, from February to March, in a deep hole in some dead branch of a tree. Of course they make the hole themselves, working like navvies. The Red Woodpecker (*Micropternus gularis*) having rather a weak bill, saves itself this labor by burrowing into the nests of tree ants, and brings up its family among them. Nobody has yet discovered how it "squares" the vicious little ants. We, in the same situation would be bitten to death in half an hour. This species is common in the country round about, and is very likely to be found in Bombay, but I have not seen it. The great Golden--back (*Brachypternus aurantius*) may occasionally visit us too.

When a native coppersmith has roughly shaped out a kettle, or *handy*, the next thing he does is to put it on a small iron anvil and hammer it patiently for hours. I cannot say certainly what purpose this serves, but it is the proper thing to do and every coppersmith's workshop resounds with the monotonous clink of the small hammer. And on the very top of a tree near by sits a little bird possessed with the conviction that the proper thing for it to do, during all the hottest hours of the day is to cry, in a sharp metallic voice, *took, took, took*, nodding its head the while and turning from side to side. The likeness between the voice of the bird and the hammer of the man has struck Englishman and Hindu alike and the name of Coppersmith has taken hold of the bird, in the languages of both. But in science it is the, Crimson-breasted Barbet (*Xantholaema indica*). The Barbets are placed by Jerdon next the Woodpeckers, which they resemble in some respects and not at all in others. While the Woodpeckers eat nothing but insects, the Barbets live almost entirely on fruit. I once kept a Coppersmith for some weeks, and tried it with insects of various kinds, but it refused them all and lived on plantains and dried dates. Yet I have seen one catching flying white ants in the air. The Barbets also perch, like common birds, instead of clambering about trunks. But they lay their eggs in holes, which they make for themselves, and then they are true Woodpeckers for the time, clinging with their feet and hammering fiercely with their stout bills. Their holes are sometimes several feet deep, and Jerdon says that they go on deepening them from year to year.

The Coppersmith is a bird about the size of a sparrow, but more dumpy altogether, with a shorter tail and heavier bill. Its color is green above, a dark but rich and shiny green, while the under-parts are whitish, coarsely streaked with green. Its forehead and a sort of collar under the throat are bright crimson, but the throat itself and a patch on each side of the face, round the eye, are pale yellow. The bird is gaudy rather than neat, and its figure

and gait are clumsy. It flies very straight and rather swiftly, but may generally be recognized by its figure. Its favorite food is the fig of the banian tree. When a banian tree is in full fruit, crowded with crows and mynas, you will not look in vain for the Coppersmith, Less conspicuous and obtrusive than the others, but holding its own and repelling interference with open beak and curious snarling noises. It lays its three white eggs about the beginning of the hot season, in a hole in a tree, as I have already said.

Every one who has visited Matheran, or Khandala, during April or May, must know the "Kootroo," which "tires the echoes" of every valley with its ringing repetition of its own name, Koor-r-r, kootroo, kootroo, kootroo. It is also a species of Barbet, much larger than the Coppersmith, and of a bright grass-green color. It abounds on the ghauts everywhere and further down the coast it may be met with even at the level of the sea, but only where there are well-wooded valleys. It will not live in Bombay.

CHAPTER XI

THE SUNBIRDS AND THE HOOPOE

THE next Tribe of Perching Birds is the *Tenuirostres* or Thin-bills, the most ill-assorted group, I think, of the whole system. Modern classification has scattered it, of course. The bond of union, as the name implies, is a Long and slender bill, but some birds have to be included, by reason of other marks of affinity, whose bills are neither long nor slender, while the snipe and curlew are excluded because they do not come into the order of Perching Birds at all. However, we are not concerned with the merits of this or that system of classification. It is enough to remember that in Jerdon's book and Barnes's and all Mr. A. O. Hume's publications, certain of the most striking and attractive of our birds, namely, the Sunbirds or Honey-suckers, and the Hoopoe, will be found in this Tribe.

Sunbirds are not the same as Humming-birds. The Humming-bird, "Half bird, half fly, the fairy king of flower," belongs to the peculiar glories of the New World. But its place in the old is taken by the Sunbird, and there are so many outward resemblances between them that it was natural at first to regard them as very nearly allied. Their anatomy, however, shows that they are radically different, and we must conclude that their outward likeness depends upon the fact that they are called upon to fill a similar place in the economy of things. We are all molded by the conditions of our life. Men of the same trade in different countries will show similar traits of character, or even a similarity of feature, in spite of all national divergences. The Koli women of this coast are distinguished from the women of all other castes by a volubility of vituperative eloquence, which betrays at once that they are "fish-wives." and the barber is the town gossip here as in Europe. So the warm-blooded whale, living always in water, has turned its limbs into fins and assumed the mask of a cold-blooded fish, while the Australian Platypus has its snout transformed into a bill like a duck, for it lives the life of a duck. Examples of this kind are so common in nature that we need not be surprised to find Sunbirds exhibiting a likeness to Humming-birds in those characteristics which fit the latter for their peculiar butterfly life; but it is, indeed, curious that they should even be clad, like them, with a radiance given to no other birds. What is the connection between a

diet of nectar and a vesture of rainbow? A poetic fitness I can see, but science is prosaic and wants a reason why. I am afraid we shall not solve the riddle until we know a great deal more than we yet do of the *meaning* of color.

Our commonest Sunbird (*Arachnecethra zeylonica*) seen at distance and in a dull light is a tiny bird of a dark brown color, except on the breast and lower parts, which are yellow. But see it at close quarters with the sun shining on it, as its admiring mate sees it! The top of its head glitters with a hue, which Jerdon defines as "bright, metallic, glossy green," while Mr. Oates calls it "metallic lilac." Perhaps one looked at it from the front and the other from behind. Its throat and the whole of its back glow with the tints of an amethyst, the shoulders and wings are of the richest maroon red (Mr. Oates says "dull crimson") and the tail is black. The admiring mate is herself dressed in the beauty of simplicity. She also is yellow on the under-parts, but paler than her lord, while her head, back, and wings are of a greenish dusky color. Yet the effect of the whole is very tasteful and pleasing. They are a loving couple, and I think the union is for life; for one seldom sees single Sunbird. Belt and other observers have stated that Humming-birds frequent flowers less for the nectar than for the little insects in them. I am sure this is not true of the Sunbird. It eats plenty of little insects, especially spiders, but it seeks flowers for their nectar. Sometimes it hovers in front of them, like a hawk moth, exploring their recesses with its long, tubular tongue; oftener it clings with its minute, black feet, throwing its lithe body into all manner of acrobatic attitudes, while it thrusts its slender, curved bill into each tube in turn. And "between whiles" it skips about, slapping its side with its tiny wings, spreading its tail like a fan, and ringing out its cheery refrain, *ching-ching, chikee, chikee, chikee*, as if it could not contain all the happiness that filled its little frame. Suddenly it darts off to another tree, followed by its faithful mate, both traversing the air in a succession of bounds and sportive spirals. I am glad that Sunbirds are never caged, but cannot help wondering why. I once caught one with a butterfly net and kept it for two months, feeding it principally on syrup.

The Sunbird's nest is one of the most wonderful examples of bird architecture in the world. It is suspended front the very end of some down-hanging branch, often in an exposed situation by the wayside. The foundation is a pear-shaped bag made of various fibers, with an opening on one side, near the top. Over the opening there is a little porch to keep out sun and rain. Having finished this the bird turns ragman and scours the country for scraps of rubbish. Fragments of bark, moss, lichens, withered petals of flowers, tags of white silk from the nests of red ants, the conglomerated pellets of chewed sawdust with which wood boring caterpillars conceal the entrances to their burrows, anything in short that looks old and shabby is pounced upon and brought home and carefully stuck about the outside of the nest, with shreds of cobweb, until the birds feel that they have made their future home a thoroughly disreputable object, like nothing so much as the unsightly collections of rubbish which one often sees gathered about the ruins of the deserted web of some large garden spider. And this, in fact, is just what you are meant to take it for. Finally, the nest is well stuffed inside with silk cotton, and the hen bird settles down to her maternal duties, cozy and secure, with her chin resting on the windowsill, so that she can see the passers-by. There are just two eggs, of a greenish white color; with brown spots gathered in a ring round the larger end. But as a rule, I

think; only one of the two is hatched. There are probably two broods in the year, and nests may be found at any season. They last long after the birds have done with them and are common objects on the trees.

Another species of Sunbird, which Jerdon calls the Purple Honeysucker (*Arachnecthra asiatica*) may frequently be met with in Bombay, though it is not nearly so common here as in the Deccan. The foundation color of this kind may be said to be black, but it glitters all over with a sheen, which ranges from green to purple. The female is very like that of the last. I have seen a third species in Bombay, the rare and splendid *Arachnecthra lotenia* (Loten's Sunbird), which Mr. Oates seems to say is not found further north than Ratnagiri. It is very like the last, but is larger and has a noticeably longer and more curved bill. Two other very lovely species are found on the hills, but they have no right to a place in this paper. We have, however, one other bird which is classed by Jerdon with the Sun-birds and called a Flowerpecker (*Dicaeum minimum*), but it has none of the splendid colors of the Sunbirds. It is, indeed, a bird of the humblest aspect, of a uniform grayish-greenish color, only paler on the under-parts, with a very short beak and tail and nothing striking or remarkable about it, except this, that it is quite the smallest bird to be seen in Bombay. By this it may be recognized, and by its fussiness, for it appears to be charged with all importance quite out of proportion to its size. It is always hustling about and uttering its one note, *chick, chick, chick*, in a very loud voice. It is said to feed upon minute insects and flower buds, but I do not recollect that I ever saw it eating anything except the soft, yellow berries of the so-called "Mistletoe" (*Loranthus*), which burdens and half kills all our mango trees. Of course it must sometimes eat other things, but I do not think you will find the bird far from the plant.

By its nest the Flowerpecker is a Sunbird. I can remember still the delight with which I first beheld that truly exquisite piece of workmanship. In its general plan it is the same as the nest of the Sunbird, a purse, with the entrance at one side, hung at the end of a branch; but there is a difference in the idea that the two birds work up to. The Sunbird, trusting to bare-faced fraud, almost courts observation, while the simple-minded Flowerpecker seeks concealment. It discards all superfluities, builds a compact little structure of silk cotton and other fibers, hardly larger than a duck's egg, and hides it among overhanging leaves. I am sure also that it chooses a site, if possible, near to a colony of vicious red ants. It eludes their notice in some of those mysterious ways known to birds while their presence is a protection against prying crows and squirrels. The nest is usually built in March or April, and the eggs, of which there are two (I once found three), are pure white, just like little sugar comfits.

It is a wide step from the Flowerpecker to the Hoopoe, a bird about the size of a Myna, or Starling, which in the Fauna of British India appears in the company of Hornbills and Kingfishers. If I could get anybody to support me, I would advance the theory that it is a species of land snipe. Its beak is more than two inches in length and very slender, and just as the snipe thrusts its sensitive forceps into soft mud for aquatic worms, so the Hoopoe probes the dry land and draws out "ant-lions" and other subterranean grubs. The legs of the snipe are long, for it has to wade in water, but those of the Hoopoe are very short indeed, so that it is obliged to carry its body very level in order to keep its tail off

the ground. This, together with its erect neck and prim gait, gives it the appearance of being a very precise sort of person, which no doubt it is. It is always exquisitely dressed, in a suit of reddish fawn with the skirts, (called in bird language, wings and tail) of some black material, with broad white bars, which flash out with beautiful effect when it starts to fly. On its crown it wears a crest, which is usually, folded down and projects behind, giving its head and neck the appearance of a toy pickaxe; but at times, when it is startled, and always in the act of alighting, the feathers start up into a lovely corona of cinnamon red bordered with black. The Hoopoe is found all over India and may be seen occasionally on Cumballa Hill and perhaps in other parts of Bombay. It breeds during the hot season, in holes, in trees or walls, but I do not think its nest is likely to be found in Bombay. It lays half-a-dozen white eggs, or more. In spite of the dainty appearance of the bird, its nest gives off an abominable stench, the cause of which does not appear to have been well ascertained. The object may be to keep unwelcome visitors at a distance.

CHAPTER XII

THE SHRIKE AND THE KING CROW

WE come now to a mixed multitude of little birds, which have not gaping mouths, long and slender bills, nor any other peculiarity, which are, in short, just ordinary "dickybirds." Cuvier divided these into two Tribes, distinguished by their beaks and their food. Those with stout, hard bills, which eat seeds he called *Conirostres*; the insect eaters with weaker bills, *Dentirostres*, because they have generally a tooth, or notch, near the point of the upper mandible. The division is a natural one on the whole, or would be if we could get rid of certain awkward birds which do not fit well into either section: the crows, for example, which eat everything and have bills neither very stout nor thin. Jerdon takes the *Dentirostres* first, and divides them into a number of families, the Shrikes, Thrushes, Flycatchers and so on. These appear to form a natural flight of steps, which has only been, spoiled by recent attempts to improve it.

The Shrike stands at the head, as it should. They say that its palate is aegithognathous and its deep plantar tendons are passerine, and, if this is true, the fact must be respected but I cannot help feeling that it is a pity, for, if the Shrike only had a desmognathous palate and a different set of tendons, it would be a miniature hawk, which is manifestly what Nature meant it for. Its strong, hooked and toothed bill, and its sharp talons are, in proportion to its size, as powerful weapons as those of a Harrier or Buzzard, and it is a bolder and fiercer marauder than either of those. Its manner of life is the same as that of a Buzzard. It sits upright on the top of a bush, or low tree, commanding a good expanse of open, grassy land, and watches for anything which it may be able to surprise and murder, a large grasshopper, a small lizard, or a creeping field mouse. Sometimes it sees a possible chance in a flock of little birds absorbed in searching for grass seeds. Then it slips from its watch tower and, gliding softly down, pops it to the midst of them without warning, and, forgetting all about the true nature of its deep plantar tendons, strikes its talons into the nearest. No other bird that I know of makes its attack in this way, except the birds of prey. The little bird shrieks and struggles, but the cruel Shrike holds fast and hammers at

the victim's head with its strong beak until it is dead, then flies away with it to some thorn bush which is its larder. There it hangs it up on a thorn and leaves it to get tender. Hence its popular name of Butcher Bird. This is no fable. I have seen the bird do it.

The Red-backed Shrike (*Lanius erythronotus*) is the only kind commonly to be met with in Bombay. The large gray species (*L. lahtora*) and the handsome little Bay-backed Shrike (*L. hardwickii*, or *vittatus*) both so plentiful in the Deccan, do not like our moist climate. Occasionally, indeed, I have seen a young Bay-back or a Brown Shrike, about the sea face near the Church gate Street Station; but these were stragglers. Even the one species we have will not bring up its family in Bombay. It leaves us before the weather gets hot, and stays away till the rains are over. Its return in September is announced by much harsh, sad screeching. By this it may be recognized, and by its conspicuous white shirtfront, long tall and grim black eyebrows. The top of its head and its shoulders and upper back are of a fine gray color, but the lower part of its back is reddish. Its tail and wings are black. Though its usual cry is raucous and somewhat dolorous, the Shrike has a flexible voice and is not a bad mimic. I remember one particularly talented individual, which lived in a friend's garden and used to entertain him with comic dialogues between bulbuls, lapwings and other birds. The Shrike makes a deep large cup-shaped nest in the thorniest bush it can find, and lays four or five handsome, spotted eggs. The usual season is from May to August.

Next come the Drongo Shrikes. A Drongo appears to be connected on the father's side with the true Shrikes and on the mother's with the Flycatchers or it may be the other way: at any rate it has kinship with both families. The King crow is a Drongo. It may seem to be superfluous to describe a King Crow, but I have met persons who supposed that it was some large and royal sort of Crow, so I will describe it. A King Crow (*Dicrurus macrocercus*, or *ater*) is a shining black bird, not the size of a starling, with a long, deeply forked tail, which perches on a telegraph wire, or a dry twig, and makes sallies into the sky after dragonflies or bees. It has nothing to do with Crows, save to vex their lives. The occasion for that is generally its nest, which it builds on some outstanding branch of a conspicuous tree, scorning concealment. Round this it establishes a "sphere of influence," and the Crow, being a notorious poacher and damaged character, is forbidden to enter that. But the Crow is always sounding the depths of our patience with the plummet of insolence, and it will try the experiment of flying lazily past the King Crow's nest or even alighting on a neighboring tree. Then the little bird gives a fierce, shrill screaming and shoots out like an arrow from a bow. Its aim is true and its beak is sharp and its target is the back of the lawbreaker. The Crow is big enough to carry off its puny enemy and picks bones, if it could catch it, but who can fight against a "bolt from the blue"? The first onset may, perhaps, be dodged, but the nimble bird wheels and rises and plunges again with derisive screams, and again and again piling pain and humiliation on the abject fugitive till it has gone far beyond the forbidden limits. Then the King sails slowly back to its tree and resumes its undisputed reign. Over the length and breadth of India this bird is found, and wherever it is found it takes the first place by sheer force of character and high spirit. Its cheery voice is one of the first sounds that greet the dawning of the day. It has not much of a song, though Jerdon says he has heard it profanely called the Scotch Nightingale. It makes a little cup shaped nest on any moderately high tree,

usually about April in this part of the country, and lays three whitish eggs with claret-colored blotches. In other parts of India there are several species of Drongos besides the common one: but the only other that I have ever seen in Bombay is Jerdon's White-bellied Drongo (*Dicrurus caerulescens*). It is white from the breast downwards and a little smaller than the King Crow. It has a charming song.

This is the proper place to mention a few birds, which are allied to the Shrikes and may occasionally be seen in Bombay. One is a medium sized bird with a slate-colored, or blue-gray, back, passing into white on the under parts. The male has the head, throat and breast deep black. The under parts are narrowly banded with dusky in immature birds. This is the Black-headed Cuckoo-shrike (*Volvocivora sykesii*). It attracts little attention except in the hot season, when it constantly utters a loud not unmusical, exclamation. I have found its nest not far from Bombay, in June; a little nest, fixed in a fork of a thorny tree, scarcely more than big enough to hold the three brown spotted eggs.

Then there is the large Cuckoo Shrike (*Grauculus macci*), a bird nearly as big as a pigeon, of a pale, slate gray color. The under parts are grayish white, narrowly banded more or less distinctly with a darker shade. It eats large insects of any soft kind and also Banian figs and other fruit. As it passes, with a peculiar undulating flight, from one tree-top to another, it calls attention to itself by a loud shrill cry of a single note. I have seen and heard it frequently on Malabar Hill. Perhaps I should also mention the Wood shrike (*Tephrodornis pondiceriana*), a plain, brownish-ashy bird about the size of a bulbul, which is very common seen, I think, in Bombay. They are insect hunters and go in pairs, or small flocks. As they fly from tree to tree one calls to another, ill sweet, whistling notes "Be thee cheery?"

Last and least but is not often are insect hunters thin, open jungle, in Bombay. They Last and least, but not to be passed by without notice, is the Minivet (*Pericrocotus perigrinus*), a dainty little bird, reminding one of a Longtailed Tit, both by its appearance and habits. They go about the trees in flocks of half-a-dozen, conversing in a low cheeping voice, and accomplishing a diligent search for little caterpillars and other insects among the foliage. Each flock is generally led by a male, black-throated and scarlet-breasted; the bevy of plainly attired birds that follow him may be either females or youngsters. They are not all his wives, for he is monogamous.

CHAPTER XIII

FLYCATCHERS

THE Flycatchers are a distinct and important branch of that standing army of birds which nature keeps to make war upon the insect hordes that threaten to eat her lip. Their duty is well defined and they keep to it. They hunt for no caterpillars among leaves, nor tap trees for grubs, nor rummage about the ground for beetles and worms. There are others whose office it is to do all these things. The Flycatchers concern themselves only with things that fly, and they catch these on the wing. The King Crow and the Bee-eater, as we have seen, do business in that line too, but they take their stations on high places and pursue

their quarry into the sky. The Flycatcher haunts sylvan shades and darts about among the branches, snapping up its tiny prey.

Indian Flycatchers may be divided into two sorts, the plain and the fancy. Of the fancy we have two species in Bombay. The first is the Paradise Fly catcher (*Tchitrea paradisi*), which wears two streamers of white satin ribbon in its tail end looks like meteor as it flits from tree to tree. Its body and wings are white too, exquisitely white, but its head and throat and distinguished crest are glossy black, with green reflections. It is a bird that would catch the eye of a blind man, and everybody who has roamed about Matheran or Mahabaleshwar must be familiar with it, but I daresay some will be surprised to hear that it is a Bombay bird. The fact is that the white plumage is the livery of the male only, and even he does not attain it until he is well advanced in years. Before that the upper parts of his body and his wings and tail, including streamers, are of a rich chestnut hue. At an earlier stage he wants the streamers, and the female never has them. A young bird, in fact, or a female, though handsome enough in its chestnut suit and black hat, looks like a sort of Bulbul, and attracts little notice. And, as we know, ladies and children generally form the majority of a community. Besides this, I believe that the Paradise Flycatcher only visits us for a short time during the cold season. I have never heard of its nest being found on this coast. For these reason it is little known as a Bombay bird.

From a Mahomedan tradition we learn that the Paradise Flycatcher belongs to that unhappy class who are spoken of as having "seen better days." At one time it was a truly glorious bird, clad from tip to toe in dazzling white and adorned with a magnificent tail of snowy plumes. But it gave way to pride and got so puffed up at length that it presumed to compare itself with the Birds of Paradise and claimed a place among them. For this it was shorn of its tail and utterly disgraced. It repented, however, and Allah was merciful and allowed it to retain two of the feathers of its tail, but he blackened its face that it might never forget its shame.

Our second fancy Flycatcher is the Fantail, Jerdon's *Leucocerca pectoralis*. This is quite another style. It is a little bird of a squat figure and smoky brown color, with white eyebrows and a merry face, but no particular points except the length and breadth of its tail. But there is not a jollier spirit among creatures clothed in feathers. With wings dropped after the manner of a turkey cock, and tail not obtrusively stuck up but held gracefully and spread like a half-open fan, it waltzes and pirouettes among the lower branches of a shady mango tree,

So buxom, blithe and debonair,

that I always feel prompted to stop and ask it, "Pry-thee, why so gay!" Every few seconds it executes a wonderful flourish in the air to capture a Ay, or let off its tinkling little song. In March or April it chooses a fork of some under-branch of a shady tree, and toils merrily with its mate to fit in a dainty little cup of fine grass or fibers, compacted and draped with cobwebs. The whole thing, when finished, is not much bigger than an egg-cup, and as the bird sits on her three ring-spotted eggs, her head projects on one side and her tail stretches away on the other. But the site is so well chosen, with just a few

leaves to come in the way of the prying eye, that you may look long before you find that nest.

Of the plain Flycatchers (plain in form, I mean, not in color), there are many species in India, and some of them are very brightly attired. Blue is the most fashionable color, and one common kind has a red breast, like a robin. Jerdon calls it Tickell's Blue Redbreast (*Cyornis tickolli*). I should not be surprised to meet with this or some of the others in Bombay, but the only species of which I can say that it is found in our island is the Southern Brown Fly Catcher (*Alseonax latirostris*). It is just "a tiny brownie bird." and no description of it would be of much assistance in identifying it at a distance. But just as you may recognize a man by his figure and walk when you cannot see his features, so you may know a bird without the help of its color. And the Brown Flycatcher has more character than most. Its very way of sitting, bolt upright, on the under twigs of a tree, and the ceaseless, nervous movement of its little tail, and the nimble little sallies after flies, all declare it, and, at closer quarters, its great black eyes, too big for its little head, are unmistakable. It is a creature of habit, frequenting the same corner of the garden day after day, and sitting on the same twig. But it comes to us for the cold season only, like M.P.'s and Commissions.

CHAPTER XIV

THE ROCK THRUSH AND THE BABBLERS

THE Thrushes come next after the Flycatchers. The home Thrush is not found here, nor any bird very like it, but its kindred are very numerous and naturalists The Seven Brothers call them all Thrushes. They are mostly much bigger birds than Flycatchers, and are more liberal in their diet, many of them being fond of fruit as well as insects of all sorts and snails and worms and "creeping things" generally. Many are musical. Some feed chiefly on the ground, while others keep to the trees. In these matters every caste has its customs, and you will never understand birds unless you note them. The first species of Thrush that we have to notice is the Rock Thrush (*Petrocossyphus cyaneus* in Jerdon), so called because its custom is to live about rocks. Gardens and groves have no attraction for it; fields and meadows are positively repulsive. But on the seashore you will find it, sitting on the rocks, quite happy in its own way. In the Deccan, but not in Bombay, it comes about houses and may often be seen perched on the ridge of the roof. Somebody has made the suggestion that it may be the "sparrow" of Scripture, which sitteth alone on the housetop. Sometimes, in sultry weather, it comes in and sits among the-rafters, fancying it is in a rocky cave. It is a solitary and silent bird, as we know it: but in April, when the prospect of going home begins to make its spirits gay, it will suddenly break out into a charming song. I forgot to say that the Rock Thrush is about the size a starling and of a uniform, dark, indigo-blue color. It is not by any means uncommon in Bombay.

Next come the Babbling Thrushes, which spend much of their time on the ground and rummage among fallen leaves. We are not accustomed to speak of autumn in India, but there is a time of year in this country as much as in any other, when each tree puts off its old clothes and gets a new suit. The only difference is that tropical trees for the most part

manage the matter more decently than those of cold countries. They do not strip themselves before the new suit is ready and stand naked till it arrives. They undress and dress at the same time, as respectable people do. In this transaction avaricious Mother Earth plays the part of Moses. She receives the "old clo" and opens a shop, and her customers are numerous and beggarly. The earthworm sneaks up from the ground and draws a rotten leaf down into its burrow, the white ants swarm everywhere, bargaining for remnants; earwigs and vagabond cockroaches wander about, examining everything and taking nothing. In such a crowd it goes without saying that there will be no lack of sharpers, pickpockets, and cut-throats, making victims of the ignorant and unwary. These are called centipedes, scorpions, predacious beetles, wolf spiders and so forth. In short, the carpet of dead leaves which is spread in every forest, grove, and neglected garden, affords a habitation and livelihood to a vast and very varied multitude of creatures, which have this special interest for us today, that there are many kinds of birds whose sole business it is to look sharply after them. Among these are many species of long-legged ground Thrushes, and foremost among them is the Babbler. The Babbler is seldom spoken of in the singular. The natives call it *Satbhai*, the Seven Brothers; in other parts it is known as the Seven Sisters. You cannot think of it except as a member of a small party. It may be a family party, father, mother, and grown-up children, but I do not think so. I believe it is simply a social party. Among animals there is not the same diversity of individual characters as among men, nor the same variety: all the individuals of one species are cast pretty much in the same simple moulds. But for this very reason each species exhibits more distinctly some one or other of the elements that go to make up the complex human character. Every virtue and every vice in the moral catalogue may be found typified in some beast or bird. So I hold. And if this be true, then the phase of character, which is expressed by the Babbler, is jolly-good fellowism. Not being acquainted with the method of distilling spirits, it does not pass the flowing bowl, but a large portion of its life is devoted to al fresco eating parties, in which the excitement of finding the viands is combined with the pleasure of consuming them, and the utmost conviviality prevails. These parties are not too large for true sociality. They consist of about half-a-dozen, whence the popular name of the bird. There is no distinction of host and guest: all are equal. They begin under some tree where the leaves have fallen thick, and proceed as humor leads. Each helps himself to what he can find, turning over the dead; leaves and; pouncing on any tempting morsel that tries to hurry away. If one is lucky and lights on a particularly fat lot, his neighbors come to his aid, and there is a good- humored squabble over the partition of it. There, is a regular flow of small talk, a good deal of mirth and laughter, occasionally an eager dispute but never a quarrel, "Fighting!" says Phil Robinson, "Not at all; do not be misled by the tone of voice. That hepta-chord clamor is not the expression of any strong feelings. It is only a way they have." They will fight for each other, but not with each other. Woe to the sparrow hawk that thinks to make a prey of any one of that party. Only a rash young fool would attempt such a thing, and it will, be taught wisdom. But, though the Babblers dine together, they do not live together. Each pair makes its nest apart, affecting great secrecy and deluding the egg-collector with mingled impudence and wiles. The nest itself is an artless and shabby affair, made of twigs and stuck into almost any situation in a small dense tree. There are usually three eggs, of an intense color between green and blue. You may find them in the hot season. But I find I have not described the bird. It seems an insult to such

a well-known public character to describe him. For the benefit of strangers, however, I may say that the Bombay Babbler (*Malacocircus somervillei*) is an earthy-colored bird, tinged with reddish about the tail. It is nearly the size of an English Thrush, with less body add more tail. It carries its tail a little raised, as ground birds generally do. Its wings droop, its feathers are loose and puffy, and altogether it reminds you of old Jones, who passes the day in his pajamas. But it is a shrewd old bird and has a wicked white eye. The Poona Babbler is bigger and wants the reddish tinge about the tail, the Malabar Babbler has a hoary head, and so on: for there are many clans of them. But they are all of one blood: you cannot mistake a Babbler.

There is a little bird, about the size of a Robin, which is said to be related to the Babblers and must be described here, for you may often see it in Bombay, though it would rather you did not. It seems to be suspicious of man and tries to keep a bush between you and it, eyeing you through the leaves. A *bush*, I say, for the White-throated Wren-Babbler (*Dumetia albogularis*), as Jerdon calls it, is a bird of bushes and hedges. It is not the custom of its caste to go into trees. It is a plain bird of a light brown color, but not difficult to recognize, if you catch a fair sight of it, by the contrast of its pure whitethroat and its reddish buffy under-parts. It makes a curious nest, a regular ball of coarse grass, with a hole in one side. The first I ever found was in a Bombay garden and was not made of grass, but of the curly paper shavings in which eau-de-cologne bottles are packed. How the bird came by this material is a question on which the imagination may exercise itself pleasantly.

Besides these there are several Thrushes, which, though they do not like to reside in Bombay, belong to this part of the country and are too pretty and too interesting to be omitted altogether. Among them is the White-winged Ground Thrush (*Geocichla cyanotis*), most common and least seen of all the beautiful birds that haunt the cool shades of Matheran. As you walk along any quiet path you may hear it whisking the fallen leaves about with its beak, and if you bear yourself gently, it will let you come very near. Its back and wings are slaty or leaden-blue, but the rest of its costume is of a fine, golden fawn color. The sides of its face are white, with two dark cheek stripes, by which you may know it among a hundred. Though generally so silent, it can sing sweetly and would make a charming cage-bird.

There is another rainbow-tinted creature to which good Jerdon has done injustice by his clumsy and pointless name--the Yellow-breasted Ground Thrush (*Pitta bengalensis*) its native name, *Nowrung*, or "Nine Colors," is better. The crown of its head is golden olive and black, its mantle green, lower back pale blue, chin and throat white, breast yellowish fawn, tip of tail bottle green, under tail coverts crimson, legs and feet pink. This bird seldom leaves the ground, even making its nest at the root of a bush.

Then there is the Idle School Boy (*Myiophonus horsfieldi*) better known to the ear than the eye for few birds have been endowed with so rich a voice, and it would be world-famous as a songster if it could only learn a tune. It is always practicing, but makes no progress. It is as large as a Blackbird and almost blacker, but its forehead and shoulders are brilliant cobalt blue, and its back and breast slightly spattered with the same. It loves

mountain streams and waterfalls and batters snails upon a smooth rock as the *dhobie* das shirts.

CHAPTER XV

THE BULBULS

WE come now to the short-legged Thrushes, which have little business on the ground but live among trees and feed much on halt. The Orioles and Bulbuls are included in this group, and the first place belongs by right to every body's familiar friend, the Common Bulbul. This is not the Bulbul of Lalla Rookh. Whether that musical creature has any existence in Persia I cannot say, but the Bulbul of India is not a musician. It is only a happy bird, to which nature has given a cheery voice and a merry heart, and it twitters with the artless joy of a child but it cannot sit and compose a song. Yet it is second only to the parrot as a favorite with those castes of natives who keep pets at all. Easily reared, easily fed, easily tamed, it has almost every quality that goes to make an engaging pot. It is spirited and pugnacious, too, and serves sporting Mussulmans as a pocket edition of the fighting cock. They carry it about perched on the finger, with a thin cord tied about its middle, and challenge rival Bulbuls, betting of course on the result; elsewhere would be the fun? In Hyderabad much money is won and lost over this sport and a famous fighting Bulbul has been sold for Rs.500. Natives feed all soft-billed birds on flour of parched gram made into a paste with *ghee*. If you are a poor ma, water will do instead of *ghee*, except for songbirds, which require their throats oiled. As a staple food I do not believe there is anything better than this, but you will make your Bulbul happier if you give it fruit of all kinds, pudding, rice, anything in short that comes to your own table. In a state of nature it feeds largely on berries and knows of many kinds for which we have no names.

The Bulbul looks a plain creature at a distance, but it is really a very handsome bird. Its face and the whole of its fine crested head are glossy black. The rest is of a rich smoky brown color, but each feather, especially on the upper part of back, has a pale edge, which makes a very effective pattern, like the scales of a fish. The "under-tail coverts." as they are called in polite society, are crimson. This is the only bit of color about the bird's costume, and corresponds to a gentleman's necktie.

For all I have said, the Bulbul is a silly bird. Being of a social and domestic disposition, it always has a wife, and would like to have a family, to which end it collects thin roots and twigs and makes a neat, if not artistic, cup-shaped nest. But as it sticks the thing in any wayside bush and visits it fussily many times a day, the crow knows exactly where it is and takes the eggs, one by one, as they are laid, if they have not been taken already by a snake or by the big red-throated goblin lizard." The Bulbul is sorry, but not discouraged. It makes another nest and lays three eggs more, which are taken like the first. So it plays the part in nature of a domestic hen, providing fresh eggs for others to eat. But sometimes a nest, luckily placed, escapes detection, and the Bulbul becomes a happy father. The eggs are pinkish white, richly spotted and blotched with claret color. The scientific name of this poor bird, I am ashamed to say, is *Pysnonotus haemorrhous*.

First cousin to the common Bulbul is the still more sprightly Red-whiskered Bulbul (*Otocompsa jocosa* in Jerdon), whose crest rises to a sharp point and curves forward a little over the beak. It is a very perky little headdress, and milliners might take a hint from it, but the girl would need to have an appropriate nose. It would not suit a Roman. The Red-whiskered Bulbul is the bird that enlivens all our hill stations with its vivacity, but it is not so common in Bombay as the other. It is of a glossy hair-brown hue on the upper parts and whitish on the under, but the cheeks (or ears) of the male are crimson and those of the female pure white. A dark brown gorget, or necklace, which does not quite meet in front, makes the white of the throat more conspicuous. The head and crest are black, and it has the red patch under the tail, which belongs to the livery of the family. Its nests and eggs are very like those of the common Bulbul and may be found at any time of the year.

In the preface to these papers I mentioned that I once bought a pair of Persian (or Sind) Bulbuls in the Crawford Market, one of which escaped, but appeared in the garden next day with a companion. I have since heard that this bird is often to be seen now on Malabar Hill, and I have seen a pair myself across the harbor, so I suppose it is in a fair way to become one of the birds of Bombay. This bird is very like the Red-whiskered Bulbul, but the cheeks are broadly white, not red, and the patch under the tail is yellow. Next there is a second cousin, which Jerdon calls the White-browed Bush Bulbul (*Ixos luteolus*). This is a clumsier bird than the other Bulbuls, uncrested and clad in an unaesthetic garb of brownish-greenish olive, passing into dusky greenish-yellowish white on the under parts. There is no bright color about it, not even under its modest tail, but its eyebrows are conspicuously white. It goes about the garden in palm and every now and then utters a loud, abrupt, rattling, but mellifluous snatch of a song. This bird is not found generally throughout India, but affects certain localities, and one of these localities is the island of Bombay. Nowhere have I found it more common. Its nest and eggs are very like those of the Common Bulbul, but it is a much deeper bird and will neither build where any crow may find, nor betray its secret by coming and going when an enemy is looking on. It usually builds on a swinging branch near the ground.

CHAPTER XVI

THE ORIOLES

THERE are Jerdon calls Bulbuls though I can see nothing- bulbuline about them and am inclined to agree with those who put with Orioles. But Jerdon had to invent English names for more than thousand birds, and it is little wonder if he was sometimes hard pressed. The one which I will mention First, because it is one of the very commonest birds in our gardens, is the beautiful little Iora (*Iora zeylonica*, or *tiphia* as it is called now), a black and yellow bird, about the size of a tomtit. The top of its head, with all its back and upper parts, is as black as a newly brushed boot, with a white band across the wing. In sharp contrast with this, the whole under parts, from chin to tail, are bright gamboge yellow. This is a dandy costume enough for any bird, but the Iora has concealed finery besides. At that season when "the young man's fancy lightly turns to thoughts of Love," you will see the male Iora spring up into the air and hover for a moment, and all at

once the long, white downy plumes that keep its ribs warm will start out 04 each side. Then, like a white puff ball, dashed with black and gold, it will slowly descend, quivering and glittering in the rays of the morning sun. This is not flirtation, nor fickle courtship. The bird is making love indeed, but to its own true-hearted spouse; for I believe that these birds, like all the Bulbuls, when once united, remain true to each other till death do them separate. The spouse is almost as lovely as her lord, but not so striking, for the top of her head and back are green instead of black. So are his for the most part during the cold season: the glossy black back is part of his summer suit. They go through life together, and if you watch him as he hops from twig to twig, hunting every leaf for caterpillars, you may notice that, every time he utters his low whistle, there is a soft echo from another tree. The Iora has no song, but scarcely any other bird has such a variety of sweet notes. Its voice is heard in every garden, and if you catch sight of it you cannot mistake it. A Little bird, like a tomtit, in black and yellow, followed by its mate in green and yellow, can be nothing else than the Iora. The nest of this bird is a beautiful piece of work, a little cup, the size of a small after-dinner coffee cup compactly woven of fine fibers and bound all round the outside with white cobwebs. A pair built in my garden last August, in a little fork, embowered in leaves, at the end of a low branch of a tree not four yards from my verandah. He discovered the place first, and with much low cheeping and happing of his wings, invited her to come and see it. She seemed to approve, but could not quite make up her mind for some days, though he often brought her in and went through the funniest little pantomime to show her what a cozy and delightful site he thought it. At last she agreed and they set to work furnishing, but so slyly did they come and go that I could not watch the progress of the work. After a week, however, I could see from one particular point the finished nest. Another week and her tail were projecting over the edge of it, and I knew that two or three little speckled eggs were under her. Every morning he would slip in and take her place, while she went to stretch her wings and get a little food. I was looking forward to the pleasure of watching the upbringing of the family, but just about the time when the eggs should have hatched, some evil beast, or black- guard crow, found and devoured them. That nest is now in my museum.

Whatever the true affinities of the Iora may be, I think there can be little question that the bird which Jerdon calls the Green Bulbul (*Phyllornis jerdoni*) is more an Oriole than anything else. It will always be known, however, as the Green Bulbul. The Green Bulbul is too little known among bird fanciers. Not only is it beautiful, exquisitely beautiful, but it is a bird of talent, and it is a wag. Disguised, in the hue of the foliage among which it lurks, it plays be-peep at the other birds and mocks them all in turn. Now it is a King Crow, now a Sunbird, now a Sparrow Hawk. You stare into the tree and see neither King Crow, nor Sunbird, nor Sparrow Hawk; but the crimson eye of the little mocker is fixed on you, as, with head turned to one side he watches your perplexity. Not till he hits across to another tree and begins the same game there will you find out who has been fooling you. For this reason few even of those who take an interest in birds know how very common the Green Bulbul really is. But I cannot account for its being so little sought after as a cage-bird. They are occasionally to be seen for sale at the Crawford Market, and I once had a young one, which I took from a nest. It was progressing well and would soon have been able to feed itself, when a vile tree snake got through the bars of the cage and killed it. I cannot think of any bird that would make a more charming pet, or a more

ornamental. Its forehead is touched with gold, its chin and throat are velvet black, its moustaches are hyacinth blue, and the tip of its shoulder is touched with the same: all the rest of it as green as a field of young rice with the dew on it." The Green Bulbul makes a loose, cup-shaped nest, usually at the end of a branch of some large tree, and lays two or three eggs, which are white with claret-colored spots. I think March or April is the usual season, but I have only once myself found a nest.

Of the tree Orioles, or Golden Orioles there are several species in India, two of which may be seen in Bombay. They are all splendid birds, more gorgeous than the Green Bulbul, and larger, being nearly the size of a starling. The commonest is the Indian Oriole (*Oriolus kundoo*), which is of a uniform, bright beautiful yellow, excepting on the eye-brows, the points of the wings (the quill feathers) and part of the tail, which are black. The beak is pink and the eyes are red. The female is tinged with greenish, and the young are very green and altogether a little "dowdy" compared with their parents. The Indian Oriole's nest is a loose cup, or bag, hung in a fork of a high tree. It is made of fine grass and fibers and any other materials that the bird finds serviceable. Jerdon found a nest tied about with a long strip of cloth, three-quarters of an inch in width, which had been stolen from the *dirzie* (tailor) in the verandah. The theft was not actually proved, but there was strong ground for suspicion. There are usually three eggs, white with dark claret-colored spots. But you are not likely to find an Oriole's nest in Bombay. These birds leave us at the beginning of the hot season and go to drier dimes inland to bring up their young. They return in September, with their families, and are very noisy on first arrival. The usual note of the Indian Oriole is a rich mellow whistle, which Jerdon spells *peeho*. The French name of the bird, *loriot*, seems to me to give the sound better. It has also a harsher cry.

The Black-headed Oriole (*O. melanocephalus* or *ceylonensis*)---the two are probably the same bird) differs from the other in having the whole head black. The yellow of the body is of a coarser shade, or, if you prefer the word, a richer. To my mind the whole bird is less tastefully got up, but it is a glorious bird. This species is very common on the whole coast during the cold season, and no doubt in Bombay too. I cannot speak with certainty, because it is easily confounded with the other unless you get a fair sight of it. All the Orioles are great fruit-eaters and frequent banian and peepul trees with the mynas and coppersmiths. But they also gobble up great, hairy caterpillars and other large, soft-bodied insects.

CHAPTER XVII

THE ROBINS AND CHATS

WE have now done with the Thrushes and come to a group of birds bound together by certain well-marked family features. They are small birds, usually dressed in black and white, brown white, always neat, but never gaudy. They are all afflicted with some form of St. Vitus's dance in the muscles of the tail: they are either twisting it, or throwing it up over their backs, or doing something else than letting it hang down decently. Lastly, they

are all groundlings, collectors of crickets and beetles and other small hard-backed insects that run upon the face of the earth, but taking little interest in caterpillars, or dies of any kind, and seldom touching fruits. In all these respects they differ from the Thrushes.

I feel that the one which ought to head the list is the Indian Robin: but you must not let your thoughts run on the bird which is begging for crumbs at our windows in the old country. Mr. Phil Robinson, speaking of the difficulty of getting up anything like a Christmas feeling in this land of regrets, complains that the very Robin instead of wearing a red waistcoat wears a red seat to its trousers. This is true if not expressed with prudery: but it is not the only difference between the two birds. The Indian Cock Robin (*Thamnobia fulicata*) is a jet-black bird, with the exception of the rusty patch above-mentioned and a narrow band of pure white across the wing, which scarcely appears except when it flies. Nevertheless it is by nature a Robin, making a friend of man, sitting on his housetop, coming into his verandah, or even singing to him from his own windowsill. You will not find it in orchards or shady gardens, for it has a prejudice against perching on a tree; but wherever there are old stone walls, humble human habitations, ruins, rocky wastes, or stony fields, there it is at home with its smoke-colored mate, running a few steps on the ground, perching on some point of rock, tossing up its tail till it almost touches the back of its head, and throwing out snatches of cheery song. No more description is needed. Everybody knows the Indian Robin. In March or April it makes its nest in a niche in a wall, or in some recess in a pile of stones, never very far above the ground; and there it lays three dingy looking eggs, of a greenish white color, speckled with brown. You will not find the nest very easily, for the Robin is cunning, like all birds that build near the ground, and will not come or go in sight of an enemy. And in that connection man is an enemy.

A larger and more imposing bird is the Magpie Robin (*Copsychus saularis*), which is also black, glossy blue-black, on the upper parts, but from the breast downwards-pure white. There is a broad white band across the wing and two-third of the tail is white. In short, it is colored very like a Magpie. The female is like the male, except that the shade of black is duller and runs to a smoky gray on the throat and breast. This bird is like the common Indian Robin in all its ways, except that, though it feeds on the ground, it perches on trees and is particularly fond of cool shady gardens. For this reasons it is a better-known bird in Bombay than the common Robin, though not nearly so familiar in the Deccan. With the exception of one bird, which haunts the deep forests of the ghauts, the Magpie Robin is the finest songster that we have in Western India. In March and April, when the Thrush and Blackbird are singing to our friends as they lie in their beds, the Magpie Robin at the same hour is pouring forth a continuous torrent of far-reaching song from the top of some palm or old mango tree. And are scarcely say, "Thank you." Whether it is that we leave our ears at home when we come out here, or that we leave our hearts at home and the ear counts for little without the heart, I do not know; but it is a melancholy fact that there are many Englishmen in this country on whom the music of its birds appears to be wholly lost. I have been assured by a man who had spent many years in India that the birds here never sang, but only cawed, or shrieked, or jabbered. When I told him that skylarks, scarcely distinguishable from the "embodied joy" of English fields, were singing every morning in the blue sky above the very road by which he went to his work, he scoffed at

me. He had never heard a skylark in India. There are of course more birds of song in this country than in England, because there are more birds altogether, and because the sun that cheers them is brighter and the sky that inspires them more blue. As to the quality of their songs, comparisons are odious and unprofitable, because we cannot invest Indian birds with the associations, which endear those of England. The voice of the Blackbird, heard in bed in the cold silence of a spring morning, will sink into one's heart in a way which is impossible in this country, where we are not much given to lying in bed of a morning, and where the cawing of crows, the crowing of cocks, the yelping of pariah dogs, and a medley of other unmusical noises come in at the open windows with the first streak of dawn. Nevertheless, if you do chance to be awake while the crows are still asleep, the song of the Magpie Robin is rich and sweet, and wonderfully powerful for so small a bird. It will go on till eight or nine o'clock, but does not sing, like the Nightingale, during the early hours of the night. As the Magpie Robin perches on trees, so it also builds its nests high, in any commodious hole or recess in a wall or tree. A favorite place is under one of the large ridge tiles at the corner of your roof. There are generally, I believe, four eggs, which are of a pale greenish color, spotted or blotched with brown. Look for them in April or May.

The Stonechats and Whinchats are for the most part lovers of sandy wildernesses, and though several species are common on the arid plains of Guzerat and the Deccan, they avoid the coast. There are two, however, which maybe mentioned here. One is what Jerdon calls the White-winged Black Robin (*Pratincola caprata*), a dapper little black-and-white bird, which balances itself on the point of a reed, or the topmost twig of a bush, and jerks its tail about and utters little warbling Robin-like notes. All who cross the harbor in search of snipe must know it very well, and on the outskirts of Bombay you may fall in with it. It builds its nest in similar places to the Common Robin. The other is a sandy-colored bird, with black-and-white tail, which Jerdon called the Wheatear (*Saxicola aenanthe*). It is not the true Wheatear, however, but a spurious imitation, and is stigmatized in "The Fauna of British India" as the "Isabelline Chat." On cold weather mornings you will sometimes find it perched on railings about the Esplanade.

The Redstart is another bird everyone ought to know, which fits in here. It is common in Poona and all over the Deccan, and very familiar, coming about oar houses and sometimes hopping in at the door. On the coast it is not so common, but you may meet with it anywhere, and it is a distinguished looking bird about which one naturally wants to know. It is in fact a globetrotter, coming to India for the cold season from its home in Cashmere or Turkestan; and it has the ague in its tail. By the peculiar shivering of that organ you may recognize it. It is a little larger than an English Robin, and of a dark-brown, or almost black color, which passes into a rusty-red on the lower back and the whole hinder part of the body and the tail.

There is another little fairy creature which few notice, except those who are curious about birds, but I must mention it, because it was in Bombay that I first made its acquaintance. I mean the Bluethroat (*Cyanecula suecica*). Near the house in which I live there was a field of Lucerne grass, irrigated from a well with a Persian wheel, and here I used to notice the happy little bird enjoying the pleasures of solitude in the rivulets that ran in the

cool shade of soft green leaves. It is quite a Robin in its figure and gait, but quiet and retiring in its disposition, and simple but neat in its suit of olive-brown. But its throat and breast are bright azure blue, and by this you may know it. This is full dress, however. Immature birds and females show scarcely a trace of it and are not so easily recognized. This bird comes to us for the cold season only, and is not uncommon across the harbor wherever there are cool shades and running waters.

CHAPTER XVIII

THE WARBLERS

In the days of Imperial Rome there were, I suppose, almost every- where large communities of humble brick makers, who made cheap bricks for poor folks' houses, and other sorts of obscure, but necessary, people: but Tacitus does not mention them, so far as I recollect. There are birds, which fill a similar place in the feathered common wealth. The Wren-Warblers and Tree Warblers do an inestimable amount of useful work and appear to enjoy as large a measure of contentment and happiness as their betters; but there is nothing about them to catch the imagination of the historian and they will never be famous. I have been perplexed as to how I should deal with them in these papers. To attempt to describe each species is out of the question, for there are many, and they are mostly so like each other that even the title "ornithologist" does not qualify one to distinguish them at a distance. If you can distinguish them with certainty when you have them in your hand, you will fully deserve the title. Jerdon was all in confusion about them. With the aid of the large collection now in the British Museum they are supposed to have been successfully unraveled, and those who please may study them in Mr. Oates's book. The best I can do here is to try to help the ordinary lover of birds to know a Wren-Warbler and a Tree-Warbler when he sees them, and to particularize a few species, which have enough of distinctive character to separate them from the crowd.

To begin with the Wren-Warblers--there are small, dingy birds with long tails, which go about among bushes and rushes and reeds, exterminating little insects. They enjoy this life so much that they moved the envy of Charles Kingsley, and you may almost recognize them from his description—

I would I were a tiny, browny bird from out the south,

Sitting among the alder holts and twittering by the stream.
I would put my tiny tail down and put up my tiny month.
And sing my tiny life away in one melodious dream.

But you must not suppose that the said "melodious dream" is a high-class composition from a musician's point of view. These little birds are not without a humble conceit of their vocal powers, all the same, and the following inimitable passage from Richard Jefferies will refresh every one who has witnessed their performances:- "He got up into the willow from the hedge parsley somehow, without being seen to climb or fly. Suddenly he crosses to the tops of the hawthorn and immediately flings himself up into

the air a yard or two, his wings and ruffled crest making a ragged outline; jerk, jerk, jerk, as if it were with the utmost difficulty he could keep even at that height. He scolds and twitters and chirps, and all at once sinks like a stone into the hedge, and out of sight like a stone into a pond."

All I have said above requires abatement if applied to the Tailor Bird (*Orthotomus sutorius*), which is nevertheless a Wren-Warbler by nature and feature. But it is a bird of some character and holds its tail up. It is such a prominent feature of the bird life of our gardens, that, if I cannot make it recognizable, these pages may as well cease. But before describing it let me remove a popular error by stating that the Tailor Bird is not called by that name because it makes a curious nest, nor because it comes out of an egg, nor for any other senseless reason. More than twenty years ago I was shown the cup-shaped nest of a Flycatcher, as a great curiosity, and was informed that this was the nest of the famous Indian Tailor Bird. It did not occur to my informant to ask why the maker of that nest should be called a tailor rather than a potter or a watchmaker, and I have discovered since that his kind is common. Therefore I take this opportunity to explain that a Tailor Bird is called a Tailor Bird because it sews. When its nesting time approaches, which is during the monsoon, it searches for a shrub or bush, with large, soft leaves, and drawing two of them together, proceeds to stitch them to one another round their edges. At that season the silk-cotton tree is bursting its pods and scattering its white clusters, so the tiny tailor has seldom any difficulty in finding cotton, which it spins into thread with its deft little feet and beak.

But if it can get ready-made thread, so much the better. Jerdon tells of one, which regularly watched the *dirzie* (tailor) in the verandah, and as soon as he had left his seat for the day, pounced down upon his carpet and carried off his ends of thread in triumph. The bird's needle is its sharp beak. Piercing a hole in the leaf, it passes the thread through and knots it at the other side, and so on till it has joined the two leaves by their edges all round and made a neat pocket, or purse, with its mouth at the top, or a little to one side. Then a soft padding of cotton inside makes it ready to receive its treasure of three or four pretty little eggs. They vary a good deal in color, but are generally white, thinly spotted with light red. I have often seen a nest made of a single large leaf, and on the, other hand, where broad-leaved plants are scarce, the bird will use more than two: but the fewer leaves the less tailoring, as the bird knows.

Last monsoon I was standing in the verandah of a friend's house in Bombay when I saw an eager Tailor Bird tugging desperately at a coir mat. I felt sure that it must be in straits for something to make its nest of, and knowing that my friend had a kind heart for the deserving poor, I brought the case to his notice the same evening. He promptly stuck a hunch of clean cotton wool in the trellis, and almost before I was out of bed next morning the bird had noticed it and was carrying off large beak-fulls. He practiced a certain amount of guile, but was easily tracked to a low, dense bush in the garden, where, with such charitable assistance, he did not take long to make his wife a very cozy house. It may encourage others in doing good to know that in due course a fine family was reared and sent out into the world in spite of the crows.

The Tailor Bird is green, or greenish-brown, on the upper part, with a golden tinge on the forehead. The under parts, are white. When the neck is stretched, a narrow dark mark appears on each side of it, as if the bird had been trying to cut its throat. In figure and gait it is very like the Jenny Wren at home, but, in- stead of the apologetic stump which that bird holds up behind, it has a long and elegant tail, with the two center feathers prolonged beyond the rest. It is no musician, but has a remarkably loud and clear voice, and is constantly saying *towhit, towhit, towhit*, or else *towhee, towhee, towhee*.

There is another kind of Tailor Bird, which Jerdon calls the Dark Ashy Wren-Warbler (*Plinia socialis*). It is remarkable for laying red eggs. They are meant to be thickly spotted with red on a white ground, but often the spots are so thick that there is no ground color left. This bird is larger and has a longer tail than the other, and is of a dark, ashy-brown on the upper parts. The under parts are buffy, or reddish white, and the two colors, dark and light, are sharply separated on the sides of the neck. This is the feature by which I recognize the bird most easily. It is not nearly so common in Bombay as the true Tailor Bird. As a tailor, ladies say it is not such a neat worker.

Another species which is everywhere in Bombay is the one which Jerdon calls the Common Wren-Warbler (*Drymoipus inornatus*). Its scientific name is a happy one. "Inornate" describes the bird in a word. It is a typical member of the group, a tiny, dingy, homely, long-tailed bird, with nothing striking about it. Jefferies account of the song fits it exactly. It is not a tailor, but it constructs a very ingenious and beautiful nest, woven of fine grass and worked into three or four high reeds, or stems of upright shrubs. The nest is always well concealed by foliage, but after the monsoon, when the leaves have fallen, it comes into view. Old nests of this kind are often to be seen in Bombay. There are few prettier eggs than those of this unornamented bird. They are of a pale blue-green color thickly marked at the larger end with spots and blotches and fine lines of chocolate-brown. There art four or five of them.

The Tree-Warbblers differ from the Wren-Warbblers in this, that they pass their lives in trees and not among grass and low bushes. There are other differences too. The Wren-Warbler is flimsy and feeble, loose-jointed and fluffy-feathered, encumbered with a long pendulous tail and fitted with little wings that just serve to carry it in a jerky way from bush to bush. The Tree-Warbler is a shapely bird, slim but firm, wiry, athletic, with a well-proportioned tail and wings that will, when the season arrives, take it from continent to continent. For all our Tree-Warbblers are foreigners. One of the commonest makes its nest in Sind, but others go to the Himalayas or Cashmere. Central Asia or Europe. In the cold season they turn southwards again and diffuse themselves over every corner of India. Many reasons have been assigned for this strange "migratory instinct." as it is called, which affects so many species of birds. No philosopher, as far as I know, has bestowed as much thought upon this same instinct as it manifests itself in Viceroys and Governors, members of Council, wives and other species of the genus Home. To me the matter appears to lie in a nutshell. When a place becomes too hot, or too cold, or too wet, the inhabitants feel a very natural inclination to leave it and go to some place, which is more comfortable. And they do so. Not all: some humble creatures, muskrats, for example, and frogs and toads and husbands and some others, cannot get away. Others are

kept back by a love of home, or a disinclination for change. But those that can go generally do go, and so it grows into a fashion. Among birds a fashion soon acquires a hereditary force and we call it an instinct. In the case of the Tree-Warblers there is a simple and all-sufficient reason for this annual journey southwards, which that if they remained they would starve. Birds that live entirely on small, soft-bodied insects, cannot afford to spend the winter in a climate in which the lower forms of life almost cease during that season. But in the tropics there is no time of the year when spiders, and little insects of many kinds may not be had. So to the tropics they go, as Jacob and his family went to Egypt. And in every green tree, at almost any hour of the day, you may see them hopping from twig to twig, hitting, clinging, looking under spray and leaf, ceaselessly and silently. For they hardly make a sound, except a low *tik* at intervals. They hold no intercourse with each other: even family ties seem to be sundered for the season. I have said that there are many species, but the differences between them seldom amount to more than this, that one is greenish-brown and another is brownish-green, and another is a little yellowish on the under-parts, or has a pale eyebrow, or a faint band on the wing, or is half-an-inch longer or half-an-inch shorter. Some few are marked more distinctly, but they belong to a side-branch of the family. Among these is the English White throat, which spends the winter with us, and the Blackcap, a much larger bird with a black cap. I believe that both these may occasionally be seen in Bombay.

Among the long reeds that grow- near water about the Flats there is a plain brown bird, larger than a sparrow, which has an invincible objection to being seen. And it would succeed without difficulty if it could keep quiet; but it feels impelled to say *chuck* every few seconds, in a loud, emphatic tone of voice. Then, when you look for it, it gets a dense bush, or clump of reeds, between itself and you, and as you move round the one side it moves round the other and says *chuck*. It is a most exasperating bird. I have spent hours trying to get a sight of it, with little enough success, but I believe it is the Large Reed Warbler (*Acrocephalus stentoreus*), which also belongs to a different branch of the great family of Warblers. There is a lesser edition of the same, *Acrocephalus dumetorum*, which may be met with in Bombay also during the cold season.

CHAPTER XIX

THE WATER-WAGTAILS, PIPITS AND TITS

When I was a boy the Wagtails had a peculiar fascination for me and the feeling has not quite faded away yet. There is something so original and droll about their idea of life! To hold a long tail horizontally behind you and wag it vigorously and incessantly to spend days near cool waters, running about on the ground--not hopping like sparrow but running with something in the air, this is Wagtails notion of the way to be happy. And it is happy: the vivacity and nimble eagerness of all its motions leave no doubt about that. No other bird behaves in this fashion. I feel sure that there must be some department of insect life which other birds have missed, or despised, and which the Wagtails have appropriated. There are green caterpillars on the tender shoots and little birds to seek for them, there are grasshoppers in the grass and mynas to Chevy them, there are beetles and earwigs under the fallen leaves and babblers to dislodge them, there are midges in the air

and swallows to hawk them, there are grubs in the rotten bough and woodpeckers to dig them out; but besides all these it appears that there are minute winged things on moist ground in great abundance, which rise like snipe when startled, and these are the game of the Water-wagtail. It runs and turns and twists and leaps into the air, and you cannot see what it is after, but you distinctly hear the snap of its little bill, like the pop of a distant snipe-shooter's gun. It follows the cattle in the pastures and runs in and out among their feet; they are its beaters, which drive the game for it. Or it hunts by itself in cool places, on the shady side of the house and wherever large trees keep out the sun.

I am thinking of the Gray Wagtail, which often wanders far from water, but not from coolness and shade. It is by far the commonest species we have and a very familiar bird throughout the cold weather. In the costume, which it wears at, that season the upper parts are bluish-gray, but its forehead and whole face are white. On its breast there is a black patch, exactly like a child's bib, and below that again it is white. In summer it wears a different costume, in which the throat and breast and the back of the head and neck are all black, but we seldom, if ever, see this, because at that time it is in Siberia or thereabouts. There is a difficulty about the name of this bird. There are in fact two species of Gray Wagtails, quite distinct from each other, but very difficult to distinguish; so much alike are they in their winter plumage. In the early seventies Mr. A. O. Hume was very much exercised about these two birds, and at that time he was very innocent of any learning towards Buddhist principles in the matter of taking animal life. He engaged all his friends and helpers in a *jehad* against the whole race of Gray Wagtails that he might determine to which species they belonged. I heard the number of the slain, but some survived, and I believe that by far the greater number of those which visit us are of the species known in Europe as the White Wagtail (*Motacilla alba*). In Jerdon's book this and the other are lumped together under the name *Motacilla dukhunensis*, the Black-faced Wagtail, a most unfortunate name for a bird whose most striking feature, when it comes to us, is its clean white face.

Then there are the Yellow and Green Wagtails, birds with olive or slate backs and yellow breasts, perplexingly like each other in their winter plumage. The two commonest kinds are described by Jerdon under the name--the Gray and Yellow Wagtail (*Calobates sulphurea*) and the Indian Field Wagtail (*Budytus viridus*). All these come to us in September and remain till nearly May, disporting themselves in all open places. They are always to be found among the tents on the Esplanade, enchanting the children, and those whose hearts are still child-like with their pretty familiarity.

There is only one other species which I need mention. It is a permanent resident and is very common all over the Deccan, but not so often seen in Bombay, because it is more a water bird than the others and will not wander far from its river or tank. It will have nothing to do with salt water. The species I mean is, of course, the pied Wagtail (*Motacilla maderaspatana*). It is a larger bird than the others and is colored very like the Magpie Robin, shining black on the upper parts, with a broad white patch on the wing, and pure white from the breast downwards, its tail is half black and half white. It has also a broad white eyebrow, which the Magpie Robin has not. It is a very sweet singer and is sometimes caged. While all our other Wagtails are migratory, the Pied Wagtail not

only remains with us the whole year, but sticks to one spot. One reason for this appears to be that it is always engaged in bringing up a family. Barnes mentions one pair which made five nests, or at least laid eggs five times, in less than half a year, and I once found a large series of old nests of all ages on the beams of a bridge. Any ledge, or shelf, or niche near to water will do. An old boat affords endless eligible sites, and I do not believe you will find a discarded hulk on a river anywhere in the Deccan without a pair of Pied Wagtails in possession, singing and swinging their long tails and driving off all rivals. There are usually three or four eggs, of a greenish-white color, spotted and splashed with brown.

The Pipits are birds' midway between the Wagtails and the Larks. Their tails are long, but not very long, and they wag them a little. In plumage they resemble Larks. There are many kinds in India, most of which love stony hills and barren plains. One species, however, which Jerdon calls the Indian Titlark (*Corydalla rufula*), meets us almost everywhere, often consorting with the Wagtails. It is a permanent resident, making its nest on the ground like a lark. I ought also perhaps to mention the Indian Tree Pipit (*Pipastes agilis*), so called because, though it lives and feeds on the ground, it always flies up into a tree when frightened. In its tastes it resembles the Wagtail, seeking moist and cool places, and the shade of trees, but in its character it is quite the reverse of that restless creature. It is a quiet bird, seldom uttering a sound, walking softly and picking up little insects gently, while its tail wags slowly like a mechanical toy. It is of a sociable disposition, and you will often see, half-a-dozen feeding under the shade of one tree. In the country, which lies opposite our harbor, where the roads are often avenues of fine trees, you may meet scores of these birds in a morning's walk. They let you come very near and then all fly silently for a little and then will fly down again. You will recognize them more easily by these traits than by color or shape, for there is nothing striking about the Tree Pipit. It leaves us as the hot season comes on and goes to bring up its young on the Himalayas.

The Larks ought to follow next, for they are in many respects very near to the Pipits, but in the arrangement, which Jerdon adopted, they were widely separated on account of their stouter bills and more vegetarian habits. Of the soft-billed, insect-eating, birds, there is only one family left, that of the Tits, and in that family there is only one bird which Bombay can claim. That is the White-eyed Tit (*Zosterops palpebrosus*), a bright little creature scarcely larger than an Amadavat, of a clear green color passing into canary-yellow on the breast. It gets its name from a narrow ring of white round each eye, which gives a peculiar expression to its face. In the cold season flocks of these birds wander about the trees, uttering a soft cheeping note, and, though I cannot say I have actually seen them in Bombay, they are so often seen just across the harbor that they cannot possibly pass us by. In the rains the rocks break up into pairs and make their neat little nests and lay their pretty blue eggs, but not on the coast. I suppose the rainfall is too heavy here.

The Indian Gray Tit, that dapper little bird, with black head and white cheeks, which makes itself so familiar in our gardens in Poona, does not appear, to come below the Ghauts. The pretty Yellow Tit easily recognized by its foppish little black-and-yellow

crest, is not very rare on the coast, but I have not seen it in Bombay.

CHAPTER XX

THE CROWS

WE have now done with the *Dentirostres* and come to the *Conirostres*, Conical Bills, Covier's next tribe. The difference between these two tribes is one that presents itself to every boy who keeps pets. The "soft-billed" birds, of which the Robin or Nightingale may be taken for an example, must be fed on artificial foods representing as nearly as possible, the insects, which are their natural diet. They seem to be delicate and difficult to rear, but it is only because you cannot give them exactly the kind of food that their constitutions require. They are like sailors fed on salt pork and ship's biscuit, who must have a little lime juice regularly, or else they will get scurvy. So these birds will get ill unless you supply them with living insects occasionally, and "Every Boy's Book" gives directions to juvenile bird-fanciers for breeding meal-worms and maggots. The "hard-billed" birds, on the contrary, need little else than good seed and fresh water, for that is their natural diet. For this reason the birds of that tribe are more commonly kept as pets. Of course there are many birds, which do not fit quite neatly into either division. The Starling, for example, has not a very stout bill and will eat anything. But this difficulty meets every system of classification. Nature has not done birds up in bundles and labeled them, and on whatever principle we attempt to sort them, we soon find that there are many which seem to belong to one lot in some respects and to another lot in others. I have followed the arrangement adopted by Dr. Jerdon, as I said at the beginning, because his book is the only readable account of Indian birds, which yet exists, and it is not likely to be superseded in our time. He divides the *Conirostres*, as far as India is concerned, into four families, the Crows, the Starlings, the Finches, and the Larks.

To begin with the first, there is surely little for me to say about the Common Crow. It speaks for itself. We all know enough about it. And yet this is not true, for in another sense we never know enough about it. The subject is inexhaustible. In any company in India, if conversation flags, bring the Crow upon the *tapis* and it will start into animation again. Zoologically considered, the Crow is merely a bird of the corvine family, which is found abundantly throughout the peninsula of India, and is, as the phrase goes, "too well known to require description." But then its chief point is that you cannot consider it zoologically, except, indeed, as you may consider man zoologically. There are said to be men of science in Germany who have succeeded in purging their minds completely from all taint of sentiment and unreason, and can think of man with scientific precision as one of the many species of the mammalian order *Quadrupara*. But to most of us this is impossible. We think habitually of man and animal as contrasted, and the Crow takes its place in our minds with man, not, indeed, as a kind of man, but as an appendage to him, one of the conditions of his life, an element of his social system. This is the peculiarity of the Crow. It has separated itself from the category of birds, which live in fields and woods and belong to nature. It lives in Mans and belongs to man in the sense in which we contrast man and nature. Like the Mahar outside an Indian village, whose perquisite is the hides of all the cattle that die in the village, the Crow lives outside the bungalow and

claims the refuse of all food eaten within it. But if you do not provide a reasonable amount of refuse, the Crows will come inside and help themselves, as the Mahars will poison cattle if enough do not die of themselves; for there is no right to which the Crows cling more tenaciously than the right to be fed by the man whose compound they clean. Sometimes Crows feed on fruits or hunt for worms in ploughed fields, or gather to catch the winged white ants, which issue from the ground before rain. But that is as boys gather blackberries or trespass in a field and eat raw turnips. Crows will not look to nature, for a living. A "wild" Crow, living in a forest or field and foraging for itself, is a thing I have not seen.

Of course I am referring to the common, or "gray-necked" Crow. The black Crow, which Jerdon calls the Indian Corby, is different. Though it often haunts our back premises in company with the others and snatches a share of anything that may be going, it is still a wild bird, and you will often find it at home in the jungles, far from all human habitations. It is very abundant on shady country roads, feeding on the fruit of the banian tree or the peepul, and when the traveler sits down in a cool place and lights a fire to cook his mid-day meal, the black Crows see the smoke from afar and come to wait upon him. They kill lizards and spit frogs on their black beaks, and I am afraid that eggs and young birds form no small part of their diet. Compared with the gray-necked Crow, the black species is not common in Bombay, but it gets commoner as you go south and in some places quite replaces the other. It is known to science as *Corvus macrorhynchos*. *Macrorhynchos* is a formidable-looking word, but only means Big Beak. The common gray-necked Crow has got the name of *Corvus splendens*, whether from the glossy blackness of its wings, or the splendor of its impudence, I will not pretend to say. It was once more aptly named *Corvus irnpudicus*, and one could wish that name had remained.

Crows are fond of sleeping together. Near almost every village there is a large tree, which is the dormitory, and to this they gather from long distances as evening comes on. When the total eclipse of the sun occurred in January 1898, the Crows of Viziadroog, where I was encamped, were quite taken in and all gathered together in the sleeping-tree. When day reappeared, almost before they had got their heads tucked in, they all started into the air with a simultaneous shout of surprise and indignation. They seemed to think that a practical joke had been played upon them. I do not know why they sleep together. It may be for safety, for, though Crows have not many enemies, there is a large horned owl, which wring their necks at night. I esteem the horned owl for that. It may seem uncharitable in me, but I confess that I cannot extend to the Crow those feelings with which I regard all other birds. I have never felt a qualm of conscience about taking a Crow's life. It is not their depredations, nor their irhpude4ce, nor their rowdy noises: I could endure all these. What I cannot forgive is the constant and ruthless massacre of innocents that goes on where Crows are allowed to have their own way. They watch every Little bird to find out if it has a nest, they count the days till the first young sparrow flutters out on its untried wings, they pounce upon it and carry it to the nearest tree and hold it under one foot and pick it to pieces, absolutely callous to the shrieks of the parents as they flutter round, distracted but helpless. For this I shoot the Crow without remorse.

Though they sleep together, the Crows do not breed in company. Each pair makes its nest

apart, in a mango tree if there is one at hand. The nest is a clumsy-looking structure, but very strongly put together, and in the center there is a neatly-made hollow, the shape of a finger bowl, lined with coir, or with horse-hair stolen from a mattress, or with whatever material can be had, not excepting brass wire from old soda water bottles: for in Bombay the Crow population has multiplied to such an extent of late years that the competition for nesting materials has become terrible. In Marine Lines, as the season advances, the Crows patrol the road, or the garden-walks, waiting for sticks to fall, or they get up into the trees and tug at twigs which are still green and will not come off. It is not many years since a pair Living in the Fort discovered a real El Dorado in an optician's shop. They worked that mine so stealthily and cleverly that before they were discovered they had succeeded in abstracting about Rs. 400 worth of spectacle frames, which they had worked up into a very superior nest, combining durability and lightness like a "helical tube." The museum of the Bombay Natural History Society contains a ponderous nest made entirely of iron wire, taken apparently from the ruins of railway fences. There are generally four eggs, of a dull bluish-green color, blotched with brown. They are laid in May, so that, if all goes well, the youngsters will have arrived at the most expensive age just when the monsoon comes, bringing frogs and all manner of plunder. But if all does not go well the mother and her naked infants stand a chance of being washed out of bed together some stormy night. In Canara the Crows will not risk this, and have their nests at the end of the monsoon. The eggs of the Black Crow are somewhat larger than those of the common kind, and its nest is usually made earlier in the season.

Though Crows are not gregarious, like Rooks, I am certain there is such a thing as Crow society, with its accepted rules of propriety and etiquette. When two Crows quarrel, the neighbors always arbitrate, and I have seen them helping the weaker party by pulling off the other. They hold assemblies, which certainly have a definite common purpose. We cannot guess what that purpose is, but how should we? Could any intelligent Crow guess the purpose of a meeting of our Municipal Corporation! Sometimes also they combine clamorously to punish some member of the community. I believe this is for an offence against propriety. Crows are great sticklers for propriety.

CHAPTER XXI

THE MYNAS

THE European Starling is common enough in the north of India, but does not roam so far south as Bombay. Its place is taken, however, by a group of birds, which, though very differently dressed, cannot disguise their relationship to the starling, for the family features are too plain. In the air they have the same direct, businesslike flight; on the ground the same parade-step; they have the same flexible voice and talent for mimicry; they make their nests in holes and lay blue eggs. Of course I mean the Mynas, which, among all classes of natives who keep pets at all, are favorite cage-birds for many reasons, but chiefly because they can be taught to speak. The performance is rather like a Punch-and-Judy dialogue, and you need to be told what the bird is saying before you can recognize it. But that matters little; it amuses people who can find little interest in the really amusing traits of the bird's natural character.

For the Myna has a character. I once had a Myna and a canary in cages, which hung at my window. A ruffian crow came in one day and perched on the top of the canary's cage. Of course the silly bird fluttered all round the cage, dinging to the bars, and gave the crow the chance it wanted. It caught a leg in its powerful beak and tried to pull it through the bars. But the canary's body could not pass through, so the poor bird's leg was literally torn out by the roots, and it died in a few minutes. I suppose the crow swallowed the leg, and shortly afterwards it returned, thinking to have a leg of the Myna for its next course. I was in the room, but it did not see me; so, after glancing round the room with a proprietary air, it bounced on to the top of the Myna's cage. But the Myna, sitting on its perch, knew it was quite safe and felt no agitation; so it was free to take an interest in the crow, and its interest fixed instantly on an ugly black toe, which hung down through the bars over its head. It caught that toe in its sharp beak and made an example of it. I tell you, it was exhilarating to observe the suddenness with which that crow jumped to the conclusion that it had urgent business elsewhere. Here is the difference between a Myna and a canary. A canary cannot learn that it is safe inside a cage. The name of the common Myna, given it by Linn9us himself, is *Acridotheres tristis*, which means the sad grasshopper-hunter. Grasshopper-hunter is admirable, but why it should be called sad is a puzzle, for no bird seems to be more uniformly in good spirits. Jerdon suggests an explanation in its sober suit of Quaker brown, the "sad color" of our forefathers. The whole of its body is of this color, getting gradually paler on the under parts. Its head and throat and breast are glossy black, but the black passes into the brown without striking contrast. All is sober and unobtrusive, yet the Myna never looks otherwise than well dressed. When it flies a white bar opens out on the wing, and its, tail is also bordered with white. Its beak and legs are yellow, and there is a small patch of bare yellow skin behind each eye. No bird is a more characteristic feature of Indian life than the Myna. It is everywhere, in town or village, fielder garden, sometimes walking after cattle and catching the grasshopper they startle, sometimes patrolling a field on its own account, nodding its heed at every step. It is always among the scarlet flowers of the Coral Tree when they are in bloom. Mynas are eminently sociable. They go in pairs, or small parties, talking a great deal. They sleep in company Like Crows, and jabber incredibly while getting to bed. In the heat of the day a Myna likes to retire to some cool, dark nook, in a shady tree, and enjoy a siesta, or carry on a gentle soliloquy. *Keeky, keeky, keeky*, it says to itself, then *churr, churr, Kok, kok, kok*. Each time it says *kok* it points to the ground with its beak and bobs its head. What the exercise means is more than I can tell. It is so hard to understand a bird. A caged Myna lightens its captivity by practicing all the sounds, which it hears. But it is not necessary to cage a tame Myna. If you get it young enough it will become a member of the family and live about the house like the cat. Mynas make their nests in holes and lay four or five blue eggs. They have two or three broods in the year, generally in the monsoon, when grasshoppers are cheap and plentiful. In the jungles they will appropriate holes made by woodpeckers and barbets, or find hollows in rotten boughs, but in a town there are always enough of suitable holes to be had in walls and roofs. They do not build in chimneys like Starlings, because there are no chimneys.

There is another species of Myna called by Jerdon *Acridotheres fuscus* the Dusky Myna, which is so like the common one that it is not usually distinguished, except by naturalists,

but if you get a near view of it you may recognize it at once by a little tuft, or crest not on the crown of its head, where birds generally wear their crests, but on the bridge of its nose. It also wants the little patch of yellow skin behind the eye, and its general hue is more dusky. This is more of a jungle bird than the other, and therefore avoids Bombay, but it is common enough on the other side of the harbor. The pale Bank Myna (*Acridotheres ginginianus*), so common in Guzerat, is not found here. Next we have some charming birds belonging to another branch of the Myna family. They are smaller and daintier birds than the Common Myna, and walk less on the ground, for they live chiefly on fruit. The commonest is the Brahminy Myna (*Temenuchus pagodarum*), a good name, for it is a high-caste bird. It is smaller than a Starling, but looks more stoutly built, being fuller about the neck and shorter in the tail. Its back and wings are ashy-brown, while the throat, breast, and all the under parts are of a soft reddish-fawn, or terra-cotta color. On its head it has a crest of long, narrow, silky black feathers, which lie gracefully on the back of its neck, except when it raises them to express surprise. Its beak is blue at the base and yellow at the point. With this exception there is nothing gaudy about the bird, and you almost need to have it in your hand to know what a beauty it is. The way in which the soft colors pass into each other and are shaded off on the margins of the wings and tail cannot be told in words. The Brahminy Myna is a regular frequenter of the Coral Tree and the Silk-cotton Tree when in flower, and of the Banian and Peepul when in fruit. It is not uncommon in parts of Bombay. It breeds, like its relations, in holes, and lays blue eggs. There are usually some at the Crawford Market, for it is a favorite cage-bird. It has a sweet voice and a little song.

The Gray-headed Myna (*Temenuchus malabaricus*) is very like the Brahminy, but all its colors are paler and it has no black on the head. Its crest is striped gray and white. I do not think it ever breeds in this part of the country, but in the cold season, or just after the rains, it haunts the Banian trees in little flocks, picking holes in the bright red fruit. It is a quiet bird, and you must look for it if you wish to see it. Both this and the last fly like Starlings, straight and swiftly.

The best known of all the tribe among bird-fanciers is the Bengal Myna, a big, rather coarse, glossy black bird, with an orange-yellow beak and two "ears" of bare yellow skin. But it is only a Bombay bird in the sense that it is never absent from the Crawford Market. Scarcely any bird in India is held in higher esteem as a talker, for it has a rich voice of great variety and compass and is really a clever mimic. A friend of mine came into possession of one which had taught itself the whole series of noises with which a Hindoo lets the world know that he is scouring his teeth and cleansing his mucous membranes generally, and it used to rehearse these in the morning. It had to be sent into exile till *chotee hazree* was over.

There is yet another bird which, though not usually called a Myna, must go with them. Unfortunately it lacks a good English name. Up-country it is commonly called the Jowaree Bird, for it is an incorrigible plunderer of ripening grain. Jerdon calls it the Rose-colored Starling (*Pastor roseus*). This bird spends the summer and brings up its family somewhere in Syria, or Mesopotamia, but almost before the rains are over it returns and overruns India in vast hordes, driving the farmer to despair. On the coast we know it best

as the most rowdy *habitué* of the Coral Tree and Silk-cotton Tree, already mentioned. These two trees, botanically so different, unite in filling a very curious place in the economy of nature. Soon after the monsoon is over they part with every leaf and stand out bare, gaunt and thorny. Then, after an interval, they hang out a signboard of scarlet, or crimson, flowers at the end of every naked branch, to invite the weary wayfarer to stop and have a drink. For each separate blossom is a flowing bowl, and the liquor in it is as delicious to a bibulous bird as "sherris sack" was to Falstaff. Every tree becomes a public house and a scene of revelry and riot. The Crows are there, of course, and the King Crows and the Mynas, and even the temperate Bulbul and the demure Coppersmith, and many another, and here and there a Palm Squirrel, taking his drink with the rest, like a foreigner. But the rowdiest element in all the motley rout is the jolly company of Rosy Starlings. They drink and swagger and babble and brawl, from before sunrise till the heat of noonday sends them off to sleep. But the days of riot are soon over. By March the birds are getting their new costume for the fashionable season in their Syrian home. And a beautiful costume it is. The head, with its long, silky, crest, and the breast and wings and tail are glossy black, but the back and all the under parts, from the breast downwards, are of a pure rosy-cream color.

CHAPTER XXII

THE WEAVER BIRD

AFTER the Mynas come the Fringillidae, or Finches, the little seed eating birds which form so large a proportion of our cage pets. Jerdon divides them into several families, among which he gives the first place to the Weaver Birds. There are several species in India, but we know only one, *Ploceus baya* the Weaver Bird *par excellence* and the head of the clan. And we know it by its works: of itself few of us know much; most of us nothing. It is like Cheeps, whose pyramid we gape at. Yet it were surely worth while to learn something of the marvelous little workman who weaves champagne bottles of grass and hangs them upside down on the trees so securely that two monsoons will not wash them away. That workman is a common place little bird, about the size of a sparrow and marked very like a sparrow. It easily passes for a sparrow and does not care, but on a near view the two are easily distinguished, sparrow is gray and brown, whereas the pi tone of a Weaver Bird is yellow. Its under parts are all of a dull yellow tint, and the feather of the back and wings are bordered with brownish-yellow. Its very bill is yellow. As the hot season advances the male gets itself a wedding suit in which, I confess, it is rather a dandy. The crown of its head and its breast then become bright yellow and its face becomes black. But it resumes its humble, work-a-day costume at the end of the rains.

Weaver Birds are more than sociable. They not only feed together in large numbers and sleep together in thousands among the mangroves that border all our large creeks, but they like to make their nests and bring up their young in company. At that time they become especially jovial and noisy. The books all say that the Weaver Bird has no song, and I will not maintain that its voice is musical, or that it makes any pretence to be a soloist; but it is grand at a chorus. When a glorious company of Weaver Birds join in

song, the likeness to an after dinner performance of "He's a Jolly Good Fellow" is most striking. Or sometimes I compare it to a party of British soldiers returning home from a festive meeting whom the spirit of patriotism makes vocal.

To come to those wonderful nests. The birds usually begin operations in July or August. They are whimsical in the choice of a site. One essential condition is that the nest must hang from the end of a drooping branch, with nothing directly under it, and, as a Palm Tree affords many such situations, a palm tree, especially a Date Palm, is often fixed upon by a whole company. In the museum of the Bombay Natural History Society there is a branch of a Brab Palm with fourteen nests attached to it. Where palms are scarce a thorny *Babul* or Bore tree, drooping over a tank, is a favorite site for a colony. But you may find single nests, or groups of nests, in all sorts of situations. Jerdon says that in Burma the eaves of a thatched bungalow are often hinged with nests. He counted over a hundred hanging from the roof of a single bungalow in Rangoon. One thing to note is that there is never the slightest attempt at concealment. The Weaver Bird will not elude its enemies; it defies them. Having fixed on a site, the birds go to work with a will, making their own yarn and weaving from dawn till evening. Several kinds of material are used. The best is very thin strips of cocoanut leaves. The bird notches the edge of a leaf with beak, and then by main force tears off a long, thin fiber, scarcely thicker than darning cotton. Any kind of rank grass can be treated in the same way of course, and is much easier to rend than a palm leaf, but the fibers are softer and not nearly so strong. Grass nests are, therefore, always more bulky and less closely woven than those made of palm leaf. The process of building is as follows, the fibers are first wound and twined very securely about the twigs and leaves at the end of the branch, and then platted into each other to form a stalk or neck, several inches in length. As this progresses it is gradually expanded in the form of an inverted wineglass, or a bell, till it is large enough for the accommodation of the family, and then the mouth of the bell is divided into two equal parts by a strong band woven across it. This is a critical stage in the progress of the work. For now the birds can sit on the cross-band and judge how the nest swings. If it is badly balanced, they bring lumps of clay and stick them on one side or the other till the defect is remedied. At least this is Jerdon's explanation of the curious patches of clay, which are generally found inside of Weaver Birds' nests. The native theory is that they are wall brackets, in which fireflies are stuck for the illumination of the nest. This is one of those things which one cannot help wishing were true. The scientific spirit, which we of this century worship, with its relentless demand for whole burnt offerings of sentiment and oblations of proof, is a spirit of a dry wind, withering the garden of the soul. But nobody really knows, except the Weaver Bird itself, why those lumps of clay are stuck on the walls of the nest. One thing certain is that, for some reason or other, the birds often get dissatisfied with the nest at this stage, and give it up and begin another. In every colony of nests there are several of these bells with a band across the mouth. In them the cock-birds will sit in rainy weather, each chattering to his spouse as she broods on her eggs. But if the nest, when it has reached that stage, pleases them, they proceed to finish it. The hen sits on the cross-band while her mate fetches fibers. He pushes them through to her from the outside and she returns them to him. So they weave, dosing up the bell on one side of the cross-band so as to form a little hollow for the eggs, and prolonging the other into a long tunnel or neck. The rim of this neck is never bound or hemmed. It grows

thinner and more flimsy to the end, which is frayed out, affording no firm hold to an enemy. The most daring squirrel will not attempt to clamber round it and get into the nest, especially if there is a well beneath. The mother and her young in their watertight and wind-proof chamber will swing in perfect security from every foe but man. There is a curious difference of opinion about the number of eggs laid by the Weaver Bird. Jerdon says two, or at the most three, and is supported by Hume and other good authorities; but the late Mr. Barnes protests that he has examined scores of nests and never found fewer than four, and sometimes as many as six. I have never been a plunderer of nests, but from such experience as I have I should be inclined to agree with Jerdon. It is not impossible that the nests in which Barnes found five or six eggs were chummeries occupied by more than one family.

It used to be the fashion to speak of beasts and animals as being endowed with some mysterious faculty called "instinct," which was a sort of compensation to them for the want of reason. When a bird made a wonderful nest it was supposed to be working by this faculty, without using its intelligence. I think this way of speaking or thinking, is pretty well exploded now, and I should like to explode it a little more. It is quite true that the lower animals have by inheritance the knowledge of many things, which we have to learn for ourselves: but difference is one of degree not of kind. So when a bird does a clever thing you may be sure it is a clever bird. The Weaver Bird is no exception. If taken young it may be taught almost anything. Jerdon quotes the following account of its performances from Mr. Blyth:-- "The truth is that the feats performed by trained Bayas are really very wonderful, and must be witnessed to be fully credited. Exhibitors carry them about, we believe, to all parts of the country, and the usual procedure is, when ladies are present, for the bird, on a sign from its master, to take a cardamom, or sweetmeat, in its bill and deposit it between a lady's lips, and repeat this offering to every lady present, the bird following the look and gesture of its master. A miniature cannon is then brought, which the bird loads with coarse grains of powder, or more commonly with small balls of powder made up for the purpose; it next seizes and skillfully uses a small ramrod, and then it takes a lighted match from its master, which it applies to the touch-hole. We have seen the little bird apply the match five or six times successively before the powder ignited, which it finally did with a report loud enough to alarm all the crows in the neighborhood, while the little Baya remained perched on the cannon, apparently quite elated with its performance."

Jerdon also says that the Weaver Bird is very ready to make its nest and bring up a family in captivity if it is only allowed room enough.

CHAPTER XXIII THE AMDAVATS AND THE MUNIAS

FROM "Amidavad," the learned Dr. Fryer tells us come small birds, "spotted with red and white no bigger than measles," of which "fifty in a cage make an admirable chorus. That was more than two hundred years ago. I do not know whether they still come from Ahmedabad, but the name has stuck to them and they still come more, than "fifty in a cage" sometimes, to people of aviaries. They need no description, for everybody knows

them. They are the tiniest of cage birds, and have red beaks: whence they are sometimes called Waxbills. The Munias are twice as large, though still very small, and have black, or slaty, bills. But they are all one brotherhood, and will live together in amity, though you pack them so thick that some have to find a perch on the backs of others. So you will find them packed in the cages at the Crawford Market. But they are not unhappy, like most of the birds there, for their wants are small. Give them dry seed and clean water and they will look on the bright side of things. It is to this happy disposition that they owe their popularity as pets, for they have no accomplishments and are as silly and uninteresting as birds can be. The common Amadavat has, indeed a little piping song, which is sweet, though feeble, and the Brown Munia sometimes warbles a love-sick ditty to its mate, hopping absurdly with its legs straddled out, but you must put your hand to your ear to catch the sound. And the rest come themselves to a note of one syllable, which they repeat about thirty-five times in a minute when they are in good spirits. But it is a pleasant note, and I think a cage-full of Amadavats and Munias in the verandah always adds to the cheerfulness of the house. The common Amadavat (*Estrela amandava*) is found in most parts of India, but I doubt its right to be called a native of Bombay. There are always some in the island, and I have seen a pair making a nest at Tardeo, but I suspect they are all escaped prisoners. The male Amadavat has two suits in the year. In summer it is a sparkling gem, splashed all over the face, breast, and back with crimson, which, however, keeps its brilliance only in the light of the sun. In caged birds it becomes brick-red. In winter the crimson feathers are mostly doffed and both sexes dress alike.

There is another lovely Amadavat, which Jerdon calls the Green Waxbill (*Estrela formosa*). It is light green above, pale yellow beneath, and prettily banded on the sides. This is certainly not a Bombay bird, though common enough in cages, together with some beautiful foreign species, which need not be mentioned here.

Of the Munias there are at least two species, which seem to be really resident in Bombay. =The commonest is Jerdon's White-backed Munia (*Munia shiata*) a black-and-white bird with a bluish beak. The "small" of its back and its under parts, from the breast downwards are white. All the rest is very dark brown, almost black in parts. Then there is the Spotted Munia (*M. undulata* or *punctulata*), of a rich brown color, passing into chestnut on the face and throat. The under parts are white, or grayish, with zebra stripes on the side. Young birds are of a dull earthy-brown color. Two other species may be described here, because they belong to our Presidency and are common in cages. One is the Black-headed Munia (*M. malacca*), a handsome bird, which has its home in Canara and Malabar. Its head, throat, and breast are glossy black, and its back wings, and tail bright chestnut. Below the breast it is white. The other is the Plain Brown Munia (*M. malabarica*), which may be found wild in Bombay, for it is everywhere, and in the Deccan is one of the commonest of small birds, making its silly nest in every wayside bush for schoolboys and crows to do what they like with. It is the utterest simpleton of a not-talented family. Its nest is constructed, after the Munia fashion, of fine grass, in a globular form, and should contain, I believe, about half a dozen pure white eggs. But the Brown Munia is "promiscuous" in family matters. It will lay eggs in a neighbor's nest instead of its own, or because it has none of its own, and its neighbor will never be so un-

neighborly as to object. Sometimes two or more families will chum together, and others will use the nest as a dormitory, leaving an egg, perhaps, as payment. So it happens that any number of eggs may be found in a Brown Munia's nest, some fresh, some "cooking," and some beyond even that. Theobald found twenty-five eggs in one nest. In an aviary, if you provide little nest-boxes, these birds will behave in the same happy-go-lucky way. I do not understand how they succeed in keeping their place in the world and escaping extermination, but they are making nests and laying plentiful eggs all the year round, so I suppose that the doctrine of chances secures a certain percentage of offspring. The Brown Munia differs from the other species in having a pointed tail and not holding it up. It is a light colored bird, pale-brown when fresh caught, but inclining to French gray if kept out of the sun. Its tail is black, and its breast and under parts are almost white.

I once saw a professional bird catcher on Malabar Hill trapping Munias. Nothing is easier. I have trapped a good many myself. If you put out a cage with a few birds in it, every passer-by of the same species will come down to inquire after their health, and if you put an empty cage beside the other, and scatter some seed in it, they will hop in quite good naturedly. All you want is some contrivance to close the door upon them. When they find themselves prisoners they are not the least discomposed, but make themselves at home and behave in a friendly manner to the former occupants. There are many kinds of foreign Munias, and some species from other parts of India, which find their way to the market and thence to the aviaries, but those I have mentioned are all that we have to do with here.

CHAPTER XXIV

THE SPARROWS, BUNTINGS AND LARKS

THE House Sparrow is one of the common birds of Bombay. It is a handsomer bird here than it is in England. Its colors are brighter and better defined. On this account an ill-advised attempt was made to raise it to the rank of a distinct species, and it appears in Jerdon as *Passer indicus*. No good comes of these unnecessary distinctions. The Sparrow is a cosmopolitan, and its name in science is *Passer domesticus*. It is a vulgar little body, which tries to be a gentleman and attains to being a gent. In dress it affects smartness and in manners gentility. In the company of ladies it becomes a masher. Nevertheless, I like the little Sparrow out of doors. But in this country you cannot keep it out of doors. It comes in and makes up its mind that it will have its nest in the corner of your ceiling. And when a Sparrow makes up its mind nothing will make it except the annihilation of that Sparrow. Its faithful spouse is always, and very strongly of the same mind as itself. So they set to work to make a hole in the corner of the ceiling-cloth, and they tear and tug with an energy, which leaves no room for failure. Then they begin to fetch hay. The quantity of hay, which a couple of Sparrows will carry in a day, is almost miraculous. Most of it tumbles down in their efforts to stuff it into the hole, for they always bring larger loads than they can manage. I remember a pair which made a hole directly over one of the pictures on my drawing-room wall, and I declare solemnly that you might have fed a horse on the hay which I removed daily and hourly front behind that picture. This savors of exaggeration, perhaps, but I mean a hack-Victoria horse. At such times the

House Sparrow requires an antidote, a "Gem Airgun" or something of the sort. I once saw, with unfeigned satisfaction, a pair of Sparrows making their nest in the top of a street-lantern near to the Victoria Station. They had no idea that lamp was lighted every night after they had gone to bed, and, when they arrived each morning and found yesterday's work reduced to ashes, they did no doubt what a brave Sparrow always does in such circumstances: they looked adversity in the face and began again. I hope they are at it still. That was ten years ago.

There are several near relations of the House Sparrow which have not attached themselves to man, like and one of them, the Yellow-throated Sparrow (*Passer flavigollis*) is common enough in Bombay. It is a more elegant and shapely bird than our house pest, but an unmistakable Sparrow. Its color is a pretty, uniform, pale ashy-brown, with a double white band on the wing and a touch of dark chestnut on the shoulder. The under parts are a little paler than the upper. It gets its name from a patch of pure yellow on the throat, but you must get near it to see that. It makes its nest during the hot season in any convenient hole, often outside, but never inside, of a house. The end of a hollow bamboo affords exactly the sort of accommodation it requires, for which reason you will find it haunting scaffoldings, plague huts, and other forms of temporary architecture. When the hen is on the eggs the cock sits within hearing and chirps by the hour with the true Sparrow accent. The eggs are usually three or four in number and of a greenish-white color, thickly blotched and clouded with brown.

We have one Bunting, which almost takes the place in India of the Yellow hammer at home, swarming about fields and hedges and singing with more cheer than music. But it is with us only in the cold season, being a Greek, or Syro-Phoenician, by birth. On a careless view the Black-headed Bunting (*Euspiza melanocephala*) may pass for a Weaver Bird on accounted its yellow front, but it is a larger and noticeably longer bird, and its colors are different. In a mature bird the whole head and face are black and contrast with the bright yellow of the breast. The shoulders and upper back are rich chestnut. In the Deccan the Black-headed Bunting visits the *bajree* and *jowaree* fields in hordes and takes toll from the poor farmer. Many are trapped and brought to Bombay for sale. They are handsome but uninteresting pets.

The Red-headed, or Chestnut-headed Bunting (*Euspiza luteola*) is another species which is not unlikely to be met with in Bombay.

The Larks constitute our last group of little seed eating birds. After them we pass on to pigeons and game birds. In a former paper I referred to the sort of man who holds the dogma that in India birds do not sing. Of course that man never saw a Lark in this country and does not believe it contains such a thing. He disputed the point with me once from dinner till bedtime, propping himself with pegs as he went along. As a matter of fact the Indian Skylark (*Alauda gulgula*), which is scarcely distinguishable from the English bird in color and not distinguishable in habit or song, is found throughout this country wherever there is an acre of corn land or open grassy ground. I have pleasant recollections of standing on the Flats in Bombay and watching it "float and run in the golden lightning of the sunken sun" till it was out of sight, and then listening to the

shower of melody, which it continued to pour down. I suppose it is less common there now. Town sweepings and refuse are not conducive to Larks.

There are two other species of Larks found throughout the Presidency, which may easily be confounded with the true Skylark. The chief difference is that they have both a sharp-pointed crest rising from the crown of the head. Jerdon calls one of them the Malabar Crested Lark (*Alauda malabarica*) and the other the Small Crested Lark (*Spizalauda deva.*)

They both soar and sing, but I am ashamed to say that I know very little about their song, or I should be ashamed if I had not noticed that Jerdon and Barnes and Gates all seem to avoid saying anything definite on the subject, from which I infer that they knew no more than I. The fact is that when the Lark is singing it is generally out of sight, or too high up to be distinguished clearly, so it is not easy to be sure which species you are listening to. It seems to follow that there cannot be a very marked difference in their songs. The Small Crested Lark at any rate is very highly esteemed by natives, especially Mahomedans, both as a songster and mimic. They keep it in a very small cage, wrapped in folds of cloth, which keep out every ray of light. I suppose the idea is that a hermit's cell is the nearest approach to heaven, but it is a curious answer to Shelley's question –

What object are the fountains

Of thy happy strain,

What fields or waves or mountains,

What shapes of sky or plain?

It succeeds. Withdrawn from all terrestrial distractions, the birds sing as they do when they are "ringed with the azure world."

Besides these we have two birds of the Lark tribe, which are not exactly Skylarks. They do not sing pt heaven's gate, but they try to keep up the traditions of the family by soaring to a little height and then closing their wing and warbling, or whistling, as they fall. Jerdon calls them Finch Larks. The commonest is the Black-bellied Pinch Lark (*Pyrrhulauda grisea*), a happy- little dust- colored bird with a very squat figure. The breast and under parts of the male are black and there is a black cross on the throat. You may disturb this bird at its dust bath on any of the roads that cross the Flats. The other species is the Rufous-tailed Pinch Lark (*Ammomaes phoenicura*), a large, dark brown bird, easily recognized by a rich rusty red color about the tail. It also has a noticeably squat figure, too broad for its size. It goes in pairs and may be seen anywhere in the open region between Tardeo, Worlee, and Parel. All the Larks make their nests on the ground or rather lay their eggs on the ground, for there is sometimes not much nest. They usually choose the hot season, when the ground is dry, and their dingly-speckled eggs are hard to find.

CHAPTER XXV

THE PIGEONS AND DOVES

EVERY system of classification puts the pigeons and doves in an order by themselves, for they are distinguished from all other birds by not one but many family features, which can- not be mistaken. Their beaks are swollen and soft at the base, but hard at the point. Their eyes are large and lustrous, and set far back in the head, which is small. Their bodies are compact and shapely, their tails neither very long nor very short, their wings generally fitted for swift and strong flight. They rarely carry any meretricious ornament, such as crests, or trains, or fancy plumes, but they are all beautiful and some of them exquisitely lovely. Yet their loveliness is not that of golden orioles and kingfishers, but rather of clouds and distant hills and soft sunsets. Nor is their beauty in their feathers only; their eyes and their feet, and even their beaks, match their plumage and complete the effect. I think also that all the motions and attitudes of pigeons are more graceful than those of other birds. But these are outward features. There are also inward characters by which the tribe is not less markedly distinguished. They are all vegetarians, some feeding on grain and some on fruit, but refusing animal-food in every shape. It is said, indeed, that they sometimes eat snails, but, if this is true, I believe they must have swallowed them by mistake for seeds. Such mistakes will happen to all of us. I knew a person whose fate it was once to mistake lizard's eggs for small white "sweeties." But let us leave that subject and get back to pigeons. They drink like horses, and not by sips as other birds do. They all lay white eggs, never more than two in number, and make simple, flat nests of twigs, which they generally place in trees or bushes, but sometimes in holes. They never sing, nor chirp, nor screech. Their voice is a plaintive moan, or coo, verging sometimes on a mellow whistle. But their highest distinction lies in the strength of their social affections and the purity of their domestic life. In these respects they are far ahead of the majority of the human race. Polygamy and polyandry are alike unknown among them. They are all monogamous, and as far as my observation goes, a pair once united remain true to each other till death do them separate. Their arts of love and courtship are strangely like our own, and after they are married they are always assuring each other of their affection by pretty tokens of tenderness. They are also devoted to their children. I had a pair of pigeons of which the hen died suddenly leaving two naked and helpless infants. I thought they must die but the father took the whole care of them on himself and brought them up successfully.

After all this, it is painful to say, what is nevertheless true, that pigeons appear to have been designed in a special degree for the food of other creatures. Being, as I have said, strict vegetarians, their plump bodies are both wholesome and tasty. In this opinion hawks and cats are at one with man. And having no means of protection and no resource in danger, except their swiftness, they are fair game. But they hold their own and multiply, for, though they lay only two eggs at a time, they go on making nest on nest all the year through--in warm countries at least. A pair of domestic pigeons, if provided with two nest boxes, will have eggs in the second before the young are out of the first.

The whole tribe may be divided for our purposes into three groups, namely, Pigeons,

Turtle Doves and Fruit Pigeons. We have one of each in Bombay. The Blue Rock, parent of all domestic is one of the commonest birds of Bombay. It differs from the Blue Rock of Europe in having the lower part of the back ashy instead of pure white, and, as this difference is constant, our bird has been separated under the name *Columba intermedia*, but it is in all other respects the same bird. It has been less affected by domestication than any other bird or beast which man has taken under his care, except the Guinea Fowl. I do not refer, of course, to fancy Pigeons---Pouters and Fantails and the like. I regard these as monstrosities, like the Japanese fishes with spare heads and tails. The ordinary domestic Pigeon, which is kept for practical purposes, differs from the original stock in scarcely anything but color. Accordingly it "reverts" to a state of nature without difficulty, and many white and parti-colored pigeons may be seen about the Fort, which have deserted some dovecote for a life of greater freedom, or perhaps eloped, with some blue lover. But the great majority of the birds are pure Blue Rocks that have never known the care of man. The race is found in every part of India, breeding on cliffs, or in the sides of wells, or under railway bridges, and plundering the pea fields for miles around. They are attracted to Bombay by two things, plentiful house accommodation and the benevolence of pious Hindoo grain merchants.

We have also one Turtle Dove, the species which Jerdon calls the Plain Brown Dove (*Turtur cambayensis*). It is humble little bird, of an earthy brown color, passing into slaty-gray on the wings, and tail, and tinged, on the head, neck and breast, with that tender tint, peculiar to doves, which the natural history books call "vinaceous," like a faded claret stain on the table cloth. On each side of the neck there is a miniature chessboard in red and black. The feet are red. That this kind of dove should be found only in Bombay is a very curious fact, which I do not know how to account for. India is rich in species of doves, some of which are widely distributed and some rather local. All over the plains of the Deccan two species divide the land. The large, pale-gray Ringdove (*Turtur risoria*) swarms in the open country, and the little Turtle Dove above-mentioned frequents the stations and gardens. In Poona it is the "common or garden" Dove, walking in the middle of the paths and uttering its broken disyllabic coo from the prickly-pear hedges. But you may go down the whole west coast, from Bombay southwards to Malabar, without meeting it or the Ringdove either. Their place is taken by the beautiful Spotted Dove, with its mournfully sweet voice. On the mainland and islands just across our harbor it is very plentiful; but I have never seen it in Bombay. The doves I have met with about Cumballa and Malabar Hills all belong to the species so common in Poona. I do not know whether it ever breeds in Bombay. Elsewhere it makes its nest in a prickly-pear, or any other thick bush, if you can apply the word nest to a flimsy platform of sticks, so thin that the two white eggs can be seen through it from below.

The name of the Plain Brown Dove in Jerdon is *Turtur cambayensis*, but in later books *T. senegalensis*. The Spotted Dove is *T. suratensis*. These names are historical monuments, indicating the places from which the first specimens of these doves found their way to Europe.

The Fruit Pigeons are green birds, which try to be parrots, but nature has stamped them doves. They live entirely on fruit, which they swallow whole, not having parrot beaks to

carve it with. A very wide gape and a most capacious and elastic throat make amends to some extent for this defect, but still the Fruit Pigeon is obliged to do without mangoes and guavas. It finds compensation in the many varieties of wild figs, which every forest in India produces, in such liberal profusion. When a fig tree fruits, it fruits all over and all at once, offering a feast to the whole country such as a Rajah gives when an heir is borne to his throne; and as mendicant Brahmins gather from distant provinces to the Rajah's feast, so the Fruit Pigeons from afar flock together to the tree while it lasts, and gorge themselves twice a day, first about 8 in the morning, and again about 4 in the afternoon. Then is the time to shoot them, for they are excellent eating, especially if their tough skins have been taken off before cooking. It is difficult at first to see them, for they are verdant like the foliage among which they sit strangely silent and motionless, but after much peering among the leafy boughs you may catch sight of a tail oscillating slowly like a pendulum. There is a solitary green bird, sitting like a wooden figure. You fire and two fall and a dozen fly off. If you are as other men you will probably utter loud and naughty words, for if you had known there were so many birds you might easily have had a second shot at them as they flew. But if you are wise, you will rule your spirit and be still. For there may be a score of pigeons in the tree yet, and others will come in small-parties from time to time, so that, with patience, you may make a very respectable bag before the feeding hour is over. Then remorse will have its turn; perhaps, as you gather up the fallen and see what perfect loveliness you have destroyed for the sake of your stomach. Body and wings are vivid green, becoming almost yellow on the breasts and under parts, head and tail are pure dove gray, a slanting yellow bar lights up each wing, and the shoulder is finished off with a splash of lilac. The feet an orange yellow and the eyes carmine with a narrow outer ring of the most intense blue. This is Jerdon's Southern Green Pigeon (*Clocopus cholrigaster*), which is the common species of the Bombay Presidency. My reason for counting it among the Birds of Bombay is that I believe it has been seen about Malabar Point; and indeed, where Banian and Peepul trees are so plentiful, it is not likely to be absent.

CHAPTER XXVI

POULTRY AND GAME BIRDS

THE next great Order of birds, of which the domestic *moorghee* is forever the type, is by no means so homogeneous as the Pigeons. Indeed, the variety of forms and fashions in which it exhibits itself has no Bush quails parallel except among fashionable womankind. Some of the Pheasants have tails twice as long as their bodies; the Quail has a tail, but you must search for it if you wish to see it; the Peacock has an average tail, but the feathers of the back above it are developed into a train four feet long. Head-dresses are as various. The Peacock wears a corona of peculiar, racket-shaped feathers; the domestic Cock a fleshy comb and wattles; the Turkey an extensible red nose, while some of the Pheasants have beautiful crests. To come to color, that mixture which is known as "game" is very much in vogue. It consists of light upon dark shades of brown, in bars or borders, or little splashes, or fine wavy lines, a sort of tartan, always the same in character, but varying in detail with each clan. This is the costume of Quails and Partridges and many others through life, and it is characteristic of the young of all, or

almost all. But the aristocracy of the race, the Peafowl's and Pheasants and Jungle Cocks, when they come of age, are appareled with an extravagance of splendor, which no other race of bird can approach, except the Humming Birds. This finery is usually the peculiar badge of the male. The other sex is attired with modesty, though always tastefully and often beautifully. This is doubtless connected with another point in which these birds differ from Pigeons, namely, that they are nearly all polygamists. To win a harem and keep it is for them success in life. To this end the young beau must dress and strut and dance and bow and scrape and practice all the arts that enslave the female heart, and he must fight too. Almost all the birds of this order are armed with spurs on their legs and practice the art of fence from their very chicken-hood. If one has a harem it follows that many must do without wives. These are the unsuccessful, which go about alone, moody and resentful trying to sow dissension in the homes of the more lucky, sometimes getting thrashed for their pains and sometimes thrashing the master of the house and taking possession of his wives, who are nothing loth. This form of social life has also been tried among men, but its influence on character has not proved elevating. It does not tend to produce good fathers nor worthy sons, as David found out and Solomon too. And among gallinaceous birds the father does not take much interest in his offspring. The mother retires into solitude and brings them up herself. Fortunately they need far less care than the young of other birds generally. Born on the ground, they get on their own legs as soon as they leave the egg, and they do not open their little mouths to be fed, but pick up food for themselves, the mother showing them the way. So they are very soon able to shift for themselves, though they follow the mother for months. Under these conditions a mother can manage a much larger family than if she had to feed each one with a spoon, and the mothers of this order are usually like the old woman who lived in a shoe, as I remember her represented in my early picture books. But there is usually only one brood in the year.

Gallinaceous birds are not musical; in fact, there is a defect in their vocal organs, so that they cannot modulate their voices. They utter clucks or clicks, or a long shrill note, dislocated in the middle, which is called a crow. Jerdon quotes the observation that there is an analogy in many points between this order and the Ruminants among beasts, namely, the cattle and sheep and deer. Certainly the gallinaceous birds appear to be even more distinctly designed for food than the Pigeons. There is no race of birds that man persecutes more persistently.

This a very long preface, but in truth there is little else to be said, for the gallinaceous order is almost unrepresented among the wild birds of Bombay. From a sporting paper that once flourished amongst us it appears that, in the early years of the century, when a Griffin arrived it was considered a good joke to lend him a couple of pariah dogs, with ears and tails cropped, and send him to Old Woman's Island (i. e. Colaba) to shoot Partridges, but I do not know whether the point of the joke was that there were partridges in Old Woman's Island or that there were none. There are none now. On the other side of the harbor the Painted Partridge (*Fruncolinus ictus*) is still found and would be plentiful if so many were not snared during the breeding season for the Bombay market. I caught one once on Cumballa Hill, or rather my dog did, but it had evidently escaped from the hands of the executioner. The Gray Quail and the Rain Quail spread everywhere during

the mid season, but there is scarcely an acre of ground left in Bombay on which they could find a living. There is one bird, however, of that family which can still make itself happy among us. I mean the Rock Bush Quail, as Jerdon calls it (*Perdicula asiatica*) though it is rather a miniature Partridge than a Quad. It is a globular bird, about the Sire of a cricket ball, and nearly the same color from the point of view from which it is generally seen. That is when you put up a covey out of a bush, and it explodes like a shell, the fragments flying in all directions. They do not fly far, but drop into bushes again and crouch for a while in silence. Then one and another utters its soft call-note, and is answered from different directions, and the covey is soon united again. They live habitually in bushes and hedges, but come out into the open to feed early in the morning and again in the evening, moving softly with no visible feet. You may watch them if you keep very still, and it is a pretty sight. Seen at close quarters the Bush Quail is rather a handsome bird, with fat cheeks and a round good-natured face. Though the general color is rather a dull brown, each feather is prettily freckled with black and buff. The male is much darker above than the female, but his under parts are white, banded with black, and his chin and throat are bright chestnut. Nobody shoots the Bush Quad, which is not worth much for the table; but it is snared by natives, and you will often find them for sale in the Crawford Market. It lays six or seven pale creamy eggs, about the end of the rains, under a bush or tuft of grass.

There is another group of small game birds known as Bustard Quails, or Button Quails, which has cost the classifiers (this word is not in the dictionary, but I cannot dispense with it) no small perplexity. They mostly want the hind toe (the birds I mean, not the classifiers) and have other peculiarities, on account of which they are given a whole Order to themselves in "The Fauna of British India." Jerdon puts them at the end of the game birds as a Family. They are quiet, shy birds that live solitary lives in fields and scrub jungle, creeping about among the grass and feeding on seeds and insects. If you chance to tread on one's toes it will start out of the grass and fly swiftly for a few yards and drop again. And this is all you will ever see of a. But you may hear it. In the morning and evening, and even at dead of night, it gives vent to some feeling in one of the strangest sounds ever uttered by bird. Jerdon describes it as "a loud, purring call." To me it suggests a nail drawn across the teeth of a sonorous comb of endless length. If it proceeds from the lungs of the bird, then the mystery is still unsolved how the quantity of air, which must be required to keep up such a sustained effort, can be compressed into so small a body. One of the eccentricities of the Bustard Quail is that the female makes all the noise. The male, as far as I know, is silent. He is smaller than she, and though I cannot say whether he is literally henpecked, there can be little doubt that he is '*sair hauden doun*.' He has to stay at home and mind the babies while she goes gadding about and fighting with her female neighbors. This is not scandal, but a fact. She differs from him in having a good deal of black on the head, throat and breast. The general color of both is reddish brown, marked with a game pattern of fine, black, cross lines, with buff edges to the feathers. I am speaking of the species, which Jerdon calls the Black-breasted Bustard Quail (*Turnix taigoor*). There are two others, but this is the one that makes the curious noise described above, and the only one, I think, that is likely to be found in Bombay. I once came upon its nest in June, not far from Bombay. It was a most artistic structure for a Quail to build, completely domed over with fine grass, with only a little

hole at one side for the owner to go in and out by. I did not catch the bird, so it may have been one of the other species, but there is not much difference.

CHAPTER XXVII

THE PLOVERS

WE come now to the Fifth Order of birds, namely, the *Grallatores*. *Grallatores* means one who goes stilts, this includes those long-shanked birds which bare their legs and walk about in shallow waters, and also many which do not go into water but walk upon dry ground on stilts. It must be admitted that this Order comprises a very mixed lot, differing from each other in habits and manner of life as well as in outward form and inward structure. Long-leggedness is almost the only common feature. They are divided into five Tribes and these again into many Families. The First Tribe contains the Ostrich and Emu and other giant fowls, whose wings are reduced to stumps for growing feathers to ornament ladies' hats. These are the Cursores, or Runners, of some authors. Next come the Bustards, Floricans, Plovers, and all that lot, which also run well, but can fly too. Like the Ostrich, they have no hind toe. As they never perch on trees, or anywhere else, a hind toe would be a superfluity. They all lay their egg on the ground, and the young run as soon as they are hatched. In this Tribe there are some, which must be noticed here. The Lapwing, Peewit, or Plover, which has the misfortune to lay fashionable eggs in England, is not found here, but it has a near relation, which is one of our most familiar birds. It has no crest, but on its cheeks there are two bright red lappets, like the wattles of a cock, and Jerdon calls it the Red-wattled Lapwing (*Lobivanellus goensis*). It is a greenish-brown bird with a good deal of black and white upon it. The head is black, with the throat, down to the upper part of the breast. Below this the under parts, with the lining of the wings, are pure white, as you see when it flies. But why should I describe the Lapwing? It needs no description and wants no introduction. It introduces itself to you: impresses itself on you; dins itself into you. Where it sprang from I cannot tell, but there it is in the air, circling round and round, now far, now very near, now high, now low, now seeming to go, but wheeling round and coming swiftly back again; for it will not go. And all the time it is reiterating, with piercing emphasis, that mysterious taunt, "Did you do it? Did you do it? Pity to do it." What does the creature mean? I have done nothing. Suddenly its mate springs into visibility and joins it. I have a suspicion, strong suspicion, that somewhere on the ground, not far from my feet, there are four stone colored eggs, with black blotches on them and like peg tops in shape, arranged in a cross with their points inwards. But it is no use looking for them. The Lapwing is such an accomplished liar that it will throw you off the scent one way or another. The poet has said it.

"The lapwing lies,

Says here when it is there."

It is altogether a wonderful character. It seems to do without food and sleep. As regards food, you never find it where there is anything to eat, and as regards sleep, the natives have a saying that it sleeps on its back with its legs turned up, for it says, "If the sky

should fall, I will catch it on my feet "; but I suspect the chief point of this saying is that it cannot be contradicted, for nobody ever caught a Lapwing asleep.

There is another kind of Lapwing, with yellow instead of red wattles on its cheeks. Otherwise it is very like the common one, but somewhat paler in color and with less black on it. There is a syllable less in its cry. It, however, likes a dry climate, and I have not often seen it on the coast.

The Gray Plover and the Golden Plover are small compact birds with very large eyes, quite different in their aspect from the Lapwing. They are found all over India in the cold season and wander a great deal, so one might fall in with a flock on the Flats or above Worlee or Colaba; but it is not likely. The Ring Plovers, or Sand Plovers (*Aegialitis*), have more right to a place in our list, for they are regular shore birds, loving sandy beaches, and they swarm all along the coast in the cold season. On the Esplanade you will meet them in scores, especially in the morning. I dare say they generally pass for "snippets." but comprehensive as that genus is, it cannot be stretched to take in the Ring Plovers. They are true Plovers, three-toed and swift running, with broad head, large eyes and stout bills. They live in small parties, running nimbly before you on the sands, or getting up and flying ahead with a swift and sinuous flight, not far above the ground. There are several species of them, which it would be useless to describe separately here. They are all small, sandy-colored birds, with a dusky collar from which they get their common name. The one which frequents our Esplanade is the Indian Ring Plover (*Aegialitis philippensis*).

In December last year (1899), when the famine inland drove many strange birds to Bombay for a living, a flock of forty or fifty large Plovers appeared on the Esplanade and remained for some weeks. They attracted much attention and were productive of letters in the newspapers. These belonged to the species, which Jerdon calls the Black-sided Lapwing (*Chettusia gregaria*). It is a grayish brown bird, with wings and tail partly white and partly Mack. It is said to be common in the Punjab and north-west.

One bird of the Plover connection remains, which, though rather rare in most parts of India, seems to like Bombay and is too striking and handsome to escape notice. I mean the Oyster-catcher, or Sea Pie. Why it should be called an Oyster-catcher I cannot guess, for I do, not think it feeds on oysters, and oysters do not need much catching. But the other name, Sea Pie, is good, and is almost sufficient to recognize it by. Its breast and under parts, with the lower back and a broad band on the wings, are pure white, and all the rest is pure black. It is a large bird, not so big as a Curlew, but bigger than a Lapwing. All the books speak of it as a winter visitant, and Mr. Blanford says that it breeds in Northern Europe and on the Caspian, but I have seen a dock of fifteen or more, not far from Bombay, on the 29th of June, looking very much at home. So there may be something still to be discovered about their habits. The name of this bird in science is *Hoematopus ostralegus*.

CHAPTER XXVIII

THE SNIPES AND SNIPPETS

HAVING done with the Plovers we come to the fowl of the waters, and I am much perplexed to deal with them. The monsoon has scarcely ended when the saltpans and still flooded rice fields on the other side of the harbor are alive with long-legged waders and web-footed swimmers of many sizes shapes. Snipe and Curlew, Stint and Sand Piper, Heron and Cormorant, Duck and Teal, seem to have arrived by one train, and having no home to go to, are wandering about in search of refreshments. Strange birds are in that crowd sometimes. Not far from Hog Island I have seen a Flamingo in the same field, I think in which I shot a Merganser another year. Are all these to be reckoned as birds of Bombay? Five or ten miles are nothing to them, and there is not one of which it can safely be said that it will not be found on our island. But to describe half of them would defeat the very purpose of these papers, which is not to perplex, but to help the sedentary Bombayite, who is not a naturalist nor a sportsman, nor a murderer under any name, so that he may recognize the birds that he sees as he takes his morning walk, drives to office, sits in his garden, or enjoys a sail in the harbor. The best way perhaps to accomplish this in the case of the waterfowl will be to notice chiefly the family feature by which one may know to which clan to refer any fowl he may see, and only to describe separately those species which are likely to attract attention, either by their commonness or on some other account.

Snipe are shot on the Flats every year, but these papers are not for shooters, and the chief peculiarity of the Snipe is that it is rarely seen except by those who seek its destruction. It feeds in secret, where grass and rushes grow in soft mud or shallow water, and does not fly till forced. Then it flies indeed. This constitutes its value for purposes of "sport." Those who are not sportsmen do indeed see it sometimes under other conditions, when it reclines on a bed of toast, with its poor beak thrust through its own ribs and its footless legs pointing at the ceiling. To recognize it then you need only look at its beak, which is 2.5 inches long and perfectly straight. No other bird of the same size has such a beak. The Jack Snipe is a much smaller bird, and its beak is only 1.5 inches long, but Jacks are not often seen on Bombay tables.

The word "Snippet" is not in the dictionary, but it is a word of very common use in India and may be defined as including any bird, which purports to be a Snipe and is not a Snipe. There are many such, and since they are much easier to shoot than a real Snipe they had their way more readily to the market and to the tables of those who buy their game. The butler calls them "Ishnap" and he gives the same name to Snipe, for he ignores the distinction. But, as I have already said, you may know them by their beaks; and you may know them by their flavor too, for beak and flavor are cause and effect in this case. The long beak of the Snipe is soft and sensitive at the point, being a peculiar instrument, wherewith the fastidious bird, probing the spongy mud, feels and draws out the tasty worm. Thus it grows fat and very savory. The Snippet's bill is a pair of forceps merely, with which it picks up any vulgar fare that offers, small crab, or snail, or water flea: and they impart to it their flavors mingled. Not those Snippets are to be despised. Some of them are very good eating. But they are not Snipe.

The majority of Snippets are either Sandpipers, Greenshanks, or Redshanks. There are three kinds of Sandpipers, of which the smallest is the commonest. Jerdon says it is the least common, but he knew little of this coast. *Actitis hypoleucus*, the Common Sandpiper, is a very familiar bird here, found beside all waters and not to be mistaken for any other when once you know it. It seems to fancy itself a Wagtail, and since nature has not given it a tail worth wagging it wags its whole hinder end, constantly and vigorously, tripping merrily about in its own company, for you never see a flock of Sandpipers. When it is frightened it skims away, just over the surface of the water, holding its wings bent like a bow. It is of a grayish brown color above, but white on the under parts. On each quill feather there is a round white spot, and when the wing is spread in flight these spots arrange themselves into a white band. Of all our cold season birds the Sandpiper is the first to arrive. I have seen it in July.

The Spotted Sandpiper (*Actitis glareola*) is quite a distinct bird from the last, not only larger and much darker, but different in its character. I would put it in a different genus if I had the disposal of these matters. It is also solitary, but is seldom found at the seaside, or near any open water. It seeks small ponds and ditches in secluded places. When disturbed it rises into the air and flies clean away, with a shrill note of alarm. It is of a dark, smoky color on all the upper parts, except the lower back and tail, which are white, with narrow black bars on the tail. The under parts, are white, streaked on the neck and breast with dusky brown. The third species, which Jerdon calls the Green Sandpiper and says is the commonest of all, does not appear to be so fond of the sea coast as the others and is not a striking bird in any way, so I need not describe it.

The Greenshanks and Redshanks are very like Sandpipers, but larger. They differ from each other, as their names indicated by the color of their legs. There are two of each, a greater and a lesser, and I do not think I can give any direction by which an amateur will be able to distinguish these four birds from each other. I can; not always do it myself. The greater Greenshanks may be known by its size and the greater Redshanks by the amount of white on its back and tail and wings, and these are the commonest. Jerdon says that the name of the greater Greenshanks in Hindustanee is *Timtimna*-- from its call. In these parts all the species are known as *Timla* for the same reason. The wild, ringing cheery note of the *Timla* is one of those sounds, which lay hold of the memory and in after years call back the scenes in which you first heard them. It must be a familiar sound to those who go snipe-shooting across the harbor, for both the Greenshanks and the Redshanks are very common among the saltpans and rice-fields. The greater Greenshanks is really a fine bird for the table, being almost as good as a Snipe and much larger. There is not much left in Bombay to attract birds of this sort, but they may be found in what still remains of the ancient "Flats." They are cold season visitors, of course, coming in September and leaving about April.

The Curlew is common on the whole coast, and when the tide has run far out and bared the black rocks round Colaba and Breach Candy, its wild and plaintive scream often comes in on the breeze. It is not a "Snippet," being much too large, but it deserves a place not far from the Snipe by reason of its bill, which is five or six inches in length; not straight, however but much curved. This also is a special instrument, and its use is to

draw small crabs, or shellfish, from their burrows in soft sand. When the tide is far out Curlews may be seen, on sandy spits or beaches, intent on this interesting occupation, walking much faster than the paddy birds with which they are often associated. They are well worth shooting, for the Curlew is usually very good eating, though occasionally rank. And it is almost the biggest wildfowl we get in these parts. But the Curlew is a wary bird and not at all willing to be shot at. When one falls, however, the neighbors gather and fly round it, screaming and wanting to know what is the matter, and you may get two or three more before they fly away. It is a cruel advantage to take of their kind-heartedness, but sport makes men cruel, whatever sportsmen may say to the contrary. *Experto crede.* At a distance the Curlew is a dingy brown bird with a little white on the back, but at close quarters it shows the game pattern so usual among these birds, each feather being dark-centered and light edged. The Whimbrel, or Lesser Curlew is just a smaller edition of its big brother, its bill being three inches in length, or a little more. It is even better on the table than the Curlew. Both birds arrive very early, before August is far on, and immediately after their arrival, while they are still strangers, many Whimbrels are netted for the Bombay market.

Another waterfowl, which is sure to catch the eye, if it should chance to visit Bombay, is the Avocet, a beautiful white bird with black pointed wings and a little black on the head and shoulders. Its long, delicate bib is curved upwards, and I do not know how the bird uses it. The Avocet is common enough at times on the mainland. Then there is the Stilt, easily known by the ridiculous length of its bright red legs, which trail behind it when it flies. Its cap, wings and back are black; the rest of it is white. Both these are good eating. The Spoonbill and the Ibis are striking birds, but very unlikely to be seen in Bombay. There is only one other bird I need mention here, and that is the Stint (*Tringa minuta*), tiniest of waterfowl. If you see a hundred dingy little birds, about the size of sparrows, all feeding together knee-deep in water, you may safely put them down as Stints.

CHAPTER XXIX

THE WATER HENS

If you see a bird like a long-legged chicken, with its tail stuck up and its head nodding at every stride, and it skulks and appears in a hedge, or among the grass and rushes on the margin of a pond, then that is Water hen. There are many kinds in India, including the British Moorhen, and several of them are likely enough to be found in Bombay, but they are great skulkers and do not willingly give you a good view. There is one, which is very easily recognized and I know that it is resident among us, because I have found its nest in Girgaum not far from the Grant Road station, where there is, or used to be some marshy land devoted to the cultivation of rice. The bird I mean is the White-breasted Water hen (*Gallinula phoenicura*) a blackish bird, with a part: white face, throat and breast. The under parts are chestnut, especially towards the tail, and as it is generally walking hastily away from you, with its tail cocked up, this is important. The contrast of these colors catches the eye and is not easily forgotten. And if the aspect of the White-breasted Water hen catches the eye, its voice does more than catch the ear. The clamor which this little bird can raise is something astounding. During the dry season it is silent enough, but as

soon as the rain begins it gets boisterous, and roars and hiccups and cackles as if it wore some great wild beast and not a small fowl. The precise import of the uproar I have never been able to make out, but it must be either a serenade or a family quarrel, for the monsoon is the season when the Water hen aspires to have a family. It lives by preference among hooded rice fields, bordered by high hedges overrun with rank creepers, among which it clammers like a cat with its great spreading feet. And in the thickest part of some such hedge it makes its clumsy nest and lays four or five beautiful eggs, of a light buff color, spotted with reddish brown and pale blue. In default of any situation of this kind, the nest I found in Bombay had been built in the top of a date palm. The young of Water hens run as soon as they are hatched, so the parent had to get their offspring down somehow from this perilous height. I was unfortunately absent when the feat was accomplished, but a, *malee* assured me that he saw the old birds bringing the young ones down in their beaks. The White-breasted Water hen, like the rest of its tribe, trusts more to its legs than its wings, but it will fly sometimes for a short distance, its legs hanging down like tasseled cords.

Among other species of Water hens I think the Pigmy Rail (*Porzana pygmaea*) is the one most likely to be met with in Bombay. It is a dainty little bird about the size of a Quail, though very different in shape. The upper parts are olive brown, spotted with white and black, while the breast, throat and under parts are bluish gray. The bill is green. I believe I have seen this bird in one of the cages of a strolling bird-seller, but that was many years ago.

The Coot must come in here, as I am following Jerdon, though for the purposes of these papers I would rather leave it till we come to the wild ducks, with which it is much more likely to be confounded. Many a Coot is not only shot, but eaten, for a duck by sportsmen of the class that shoot Snippets for Snipe. It is not a Duck, however. Its bill is not the flat bill of a Duck and, *ergo* its diet is not the same, nor its flavor: nor are its feet webbed like a Duck's, but each separate toe is furnished with a curious fringe of webbing. It is, in fact, a Water hen, which, being specially equipped for swimming does not live about water but in it. Its favorite haunts are large tanks, or sheets of water, with reedy and weedy margins. Swimming about among these it looks very like a Duck and at a distance may be mistaken by anybody but its dumpy figure and very short tail serve to distinguish it even before one gets near enough to make out its uniform black color and conspicuous white bill. The presence of Coots on any water is said to encourage and attract Ducks, and the two are often found in company; but when a gunner gets among them the Ducks are soon gone, while the Coots remain. When they do take wing they rise with difficulty, beating the water with their wings and feet. Then they fly slowly round and soon settle again. For this reason they are very satisfactory game to a "sportsman" who finds that he has no luck with Ducks. I have not seen a Coot in Bombay, except in the guise of a present of game, but it is very common everywhere in the neighborhood.

Near to the Water hens Jerdon puts the Jacanas. Blanford relegates them to a different Order, and he may be right; but we are not concerned with their "true inwardness" here. Outwardly they are Water- hens, which neither haunt the borderland of rushes, like the Rail, nor swim out into the deep, like the Coot, but walk upon the water. Their toes are

so long that, wherever the weeds and water lilies are at all thick, they can travel with as much ease as a Laplander on his snowshoes. The paradise of the Jacana is one of those ancient tanks, choked with crimson and white-flowered lotus, which are at once the wealth and the glory of an Indian village; where the women fill their water pots and wash their clothes, and the men bathe and the buffaloes wallow and everybody is happy where no thought of microbe and bacillus blows across the placid calm of life, and the Pasteur-Mallie filter is unknown. We are rapidly infecting the people with our own esteem for ugly utilities, and the rusty water-tap is dispossessing the picturesque tank; but there are many left yet in the suburbs of Bombay, though the villages, which they once vitalized, may have disappeared. And there is one left in our very midst, the Gowalia tank. In such places, if you look for it, you may perhaps see the Jacana gingerly treading the floating leaves. There are two species, the Bronze-winged (*Parra indica*) and the Pheasant-tailed (*Hydrophasianus chirurgus*). The latter is a bird never to be forgotten if seen in its wedding dress. Its head, face and throat are then white, the back of its neck golden yellow, its body mostly dark chestnut-brown, and its wings black and white. Its tail is black and shaped like the tail of a domestic cock or a pheasant, the middle feathers being ten inches long. In the cold season it drops this ornament and assumes a plainer plumage, brown above and white beneath. A Mack line from the cooler of the mouth runs down each side of the neck and forms a broad gorget on the breast. The nest of the Jacana is a floating heap of weeds among the rushes and lilies that it loves. The eggs are always four, those of the Bronze-winged being buff, or olive, crossed all over with a maze of black lines, while those of the Pheasant-tailed are of a uniform, glossy, bronze-brown color.

The Purple Coot and Water Cock, though familiar enough to sportsmen everywhere, can scarcely claim a place here.

CHAPTER XXX

THE HERONS

THERE is a good deal of confusion in the popular mind about Herons Storks and Cranes, which are really very different tribes of birds, though they all have long necks and are mostly of large size and are all more or less given to spending their time near water. Cranes feed chiefly on grain. They make their nests on the ground and the young get on their own legs almost as they are hatched, like chicken. In this respect they resemble Plovers and all the waterfowl, which we have been considering hitherto. Storks and Herons, on the other hand, build their nests on trees, and the young are at first naked and helpless, like young crows or sparrows. To my mind this is a very important difference, entailing greater parental responsibility and implying higher intelligence.

In modern systems these birds are rightly classed in a different order from the Cranes, and though Jerdon put them in the same order, he separated them by a wide interval, the difference between Storks and Herons is not so great nor so easily explained. The Storks are heavier birds, with large and clumsy bills; but the most obvious outward sign by which they may be known from one another is this, that when a Stork flies, it holds its neck out straight and stiff, and looks like a man carrying his hat on the point of his

walking stick; while the Heron doubles back its more flexible neck and rests its head between its shoulders.

The Great Sarus, the Common Crane and the beautiful and savory Demoiselle, or *Kullum* of sportsmen, are very familiar birds in Guzerat and the north of India; but I have never seen them, or heard of their occurrence, on this coast, except during last cold season, when the famine in Guzerat forced them to wander in search of water. Of Storks there are several species which may be met with up the creeks, and the well-known Adjutant, the Goliath of the whole Stork tribe, consorts with the Vultures at the Towers of Silence, as I learned recently from the veracious sketches of a well-known "special artist" sent out by one of the illustrated papers. We all know that the British public demands paint trees in an oriental scene and perhaps it demands Adjutants too. But that special artist is an honorable man. Somehow it happens that I have never seen that Adjutant at the Towers of Silence, nor any other Stork in Bombay. Of Herons, however, we have no lack. The commonest is the Pond Heron, or Blind Heron, or Paddy Bird (*Ardeola leucoptra*), which despises not the most paltry tank or pool that will hold a frog. Even the native Christians of Salsette do not esteem this a wry dainty bird for the table, so it is little persecuted and grows very familiar, allowing you to approach within a few paces before it suddenly produces a pair of snowy wings from its pockets and flaps away, till it unfolded those wings it was a yellowish-gray bird, darker on the back and streaky about the neck and breast. During the breeding season that is in the rains its back and shoulders are clothed with a mantle of rich maroon, and a crest of long, pointed, white feathers adorns its head. It is then a handsome bird, though its snakey, yellow eyes spoil its expression. Its legs are green and its beak greenish yellow, blackened at the tip as if burnt. Like all Herons, it has a great deal of feather and little solid body. The length of its serpentine neck is quite disguised by the long plumes that hang down in front and behind. The small frogs and fishes and even the cautious crabs have little suspicion of the length of its neck. To watch for these, standing ankle-deep in dirty water, is its sole occupation, and that long, hard, sharp beak is a perfect pair of forceps for plucking them out of their element. Then they go down "the red lane" without further ceremony, for the throat of the Heron, slender as it looks, is wonderfully elastic. Almost all the Herons make their nests in company in some large tree. The Pond Herons of Back Bay have appropriated a large tamarind tree in Marine Lines, on the topmost twigs of which, from the month of May onwards, you will find a whole village. The nests are like those of crows, but not so well built. The eggs, four or five in number, are of a greenish blue color. At nesting time the Pond Heron is rather noisy. Its voice is a short croak, or cough, not the least musical.

Next come the White Herons, or Egrets, pure white birds, more graceful in every way than the podgy Pond Heron. There are three species, which differ from one another only in size. The largest is about the size of the English Heron, but pure white all over. It is not very common here, nor is the next, which is a size smaller. The third, which Jerdon calls the Little Egret (*Herodias garzetta*), is very plentiful and would be more so if Goanese gunners did not persecute it for its flesh and its feathers. The feathers are exported to Europe in large quantities for the decoration of woman's hats, or some such shameful purpose. The Little Egret is somewhat larger than the Pond Heron and much taller. During the breeding season it is adorned with long, flowing plumes on the back

and breast, and two thin, hair like feathers droop from the back of its head. Wherever there is shallow water, or hooded ground, this species may be seen in companies wading for little frogs and fishes. I once saw one trying to swallow a snake. They build like the Pond Heron and often in its company.

About the same size as the Little Egret, but of a slatey-gray color, is the Ashy Egret (*Demiegretta asha*). It is common enough, but haunts the sea-shore rather than fresh waters, and is well named by Dr. Blanford the "Reef Heron."

There is yet another species, which is very easily mistaken for the Little Egret, being white like it and about the same size but it belongs to a lower caste and its habits are not quite respectable, on which account Mahomedans will not eat it. It lives principally on insects and follows cattle diligently when they are grazing, for the sake of the grasshoppers stirred by their feet, and also for the chance of usefulness in relieving the poor beasts of various small tormentors. The cattle appreciate the kindness and repay it by giving the birds the freedom of their backs. Sometimes you will see a meek buffalo chewing the cud, while a Cattle Egret stands on its head and performs surgical operations on its ears. The name of this species in Jerdon is *Buphus coromandus*. During the monsoon its whole neck is clothed with plumes of a rich orange-buff color, and you may easily distinguish it. In the cold season it is all white, but even then you may always recognize it, if you get near enough, by its yellow bill. The bill of the Little Egret is black. It nests in company with Pond Herons and other Egrets, laying paler eggs. The common native name for all these birds is *Bugla*, but the Cattle Egret is sometimes distinguished as *Gai-bugla*.

The European, or Blue Heron, which our forefathers delighted to hawk, is not uncommon in all the creeks and rivers of this coast, and if it is not often seen in Bombay, the reason is that it is afraid to show itself where its great enemy, man, is in such force. Even in quiet country places it learns to be very wary, for there is scarcely any waterfowl, which is more sought after by native *shikarees*. The mouths of my Mussulman lascars water when they see one and many a time have I been urged to shoot that grand "shikar." Yet they win not eat Pond Herons at all, and are suspicious of even the White Egrets on account of the disreputable character of the Cattle Egret. The Blue Heron (*Ardea cinerea*) is a less sociable bird than the Egrets and does not generally go in flocks, but both at home and there they form "heronries" at nesting time.

One of the handsomest of the whole family is the Night Heron (*Nycticorax griscus*), but I need scarcely describe it here, because the chance of its being seen is small. It may be heard everywhere, uttering its loud *wak* as it flies overhead after darkness has set in. Strange to say, it keeps most promiscuous company at nesting time, consorting not only with other Herons but with Cormorants. As these feed in the day and it never goes abroad till night, they must be an unmitigated nuisance to each other, which may explain the incessant bad language that goes on at one of these nesting trees. I know a giant tree not ten miles from Bombay in which there is scarcely a space to spare in which a nest could stick. The ground underneath is strewn with eggshells and other less savory fragments.

CHAPTER XXXI

THE DUCKS, CORMORANTS AND GREBES

WE have arrived at the last Order of birds, the *Natatores*, or Swimmers, whose home is on the face of the waters. Some of them cannot walk at all, and on dry land, but in their own element they are happy and graceful. Their bodies are long and boat-shaped, their plumage close-set and well oiled, so that any fluid rolls off them "like water off a duck's back," their legs are short and set far back, and their feet are converted into paddles by a web which stretches from toe to toe. With these propellers they make their way swiftly over the surface of the water and most of them dive well. Some feed on fishes and some on water-weeds, or insects, or snails. Their habits in this respect have a practical interest for us, because we feed on them and their taste in one sense depends on their taste in another.

The domestic duck is the type of the *Natatores*. In a wild state the same bird is known to sportsmen as the Mallard, which is abundant in Sind and the Punjab, but rarely strays so far south as this. There are several species of wild ducks, however, which visit us regularly, such as the Pintail, the Gadwall, the Common and Garganey Teals, and the Shoveller. The last is a coarse feeder and its flavor is variable, but the other four are among the most tasty of the whole tribe. They are all migratory birds, spending the summer in Central Asia, or Europe, or even the Arctic Regions. They arrive here in September or October, and at first wander about in an aimless way, settling on any water that seems to offer a chance of a meal. Large flocks may be seen crossing our harbor in different directions, and of course they will settle at times on the inundated parts of the Flats. This is the native *shikaree's* opportunity. His idea of sport is to bag a maximum of meat with a minimum expenditure of powder and shot. So he gets up before dawn, and, having marked a Rock, wriggles like a mudfish, under cover of a ridge of earth, or a tuft of grass, till he gets within range, then sends a heavy charge of large shot into the thick of them. I have known of fourteen ducks being bagged in this way by a single shot. The wild duck is no fool, and a few sharp lessons of this kind soon teach the survivors wisdom, which is the reason that there is so little duck-shooting to be had in the vicinity of Bombay. The ducks are here, and they feed wherever there is food, but they get away before daylight and sleep on the open sea. All through the cold season you may hear the sound of wings at night, as a flock passes overhead, in places where you will look for them in vain by day.

I need not try to describe the different species of wild ducks, for a man who does not shoot will not easily learn to distinguish one from another, but he may know enough not to confound them with the Coot, which has already been described, or with the Cormorant. The Little Cormorant (*Graculus javanicus* in Jerdon) is a very common bird on this coast, especially up the creeks, and I daresay it often passes for a sort of black duck, but it differs from a duck as a gentleman differs from a loafer. The Cormorant is a thoroughly shabby bird, with a large, ragged tail, and colored all over a sordid black, like the Sunday coat of a Goanese cook. At least, this is its aspect at a distance. In its habits also it is unlike a duck. It seldom rests on the water, but perches on rocks or even on

trees, sitting very upright. It flies well, but generally at no great height and slowly, compared with a wild duck; not in orderly flocks either, but singly, or in small, loose parties. Its beak is not flat, but narrow and a little hooked at the tip, the use of it being to catch and hold a slippery fish, for the Cormorant is fisher by trade. The Chinese tame them and employ them as divers, fitting a ring on their neck to prevent them swallowing what they catch, which seems mean. The Hindoo fisherman is not so ingenious as the Chinaman and has not discovered this use of the Cormorant. Jerdon states that these birds have the power of inflating the gullet to enable them "to swallow considerable sized fish," and their digestion is "very rapid." to which may be added that they have a healthy appetite. I imagine that, when the Government takes the Indian fisheries in hand, as it has done those at home, it will be found expedient to exterminate the Cormorants. I hope that day is far distant, however. A crowd of Cormorants after a great shoals of little fishes affords a most exciting spectacle. They hem the shoal in and drive it towards the shore, diving and coming up and diving again in breathless haste. All the White Egrets in the neighborhood come down to share in the fun and run along the edge of the water, plucking out any shivering refugee that comes within reach. So there is Black Death behind and pale death in front, and the massacre must be terrible.

There are two other species of Cormorants, the Large and the Lesser, as Jerdon calls them, but they are not nearly so common. The Snake Bird (*Plotus melanogaster*), so called from its serpentine head and neck, is more familiar. At a distance, sitting on a low tree, with its wings hold out to dry, it looks like a big Cormorant with the neck of a Heron fitted on to its shoulders; but at close quarters it is a very handsome bird. Its plumage is peculiar; the feathers on the shoulders especially being long and narrow, like the hackles of a cock. Each feather is black or dark brown, with a silvery border, or spotted with silvery white, and the effect is very beautiful. When the Snake Bird is swimming it often lets the whole of its body sink under the surface, so that nothing is visible except the head and neck. At such times it looks like a snake coming up to breathe. All these birds breed on trees and lay greenish-white eggs during the rainy season. The Snake Bird generally chooses a small tree growing out of water and is not gregarious, but the Little Cormorants form great societies and resort to the biggest trees they can find. As I have said already they do not object to the company of Herons.

One Little bird remains to be described which is more thoroughly aquatic than any that I have yet mentioned. The Dabchick, or Little Grebe (*Podiceps philipensis*), can just stand up and toddle a few steps on land, and though it evidently can fly much better than any one would infer from its puny wings, and makes its way over long distances from one tank to another, it never thinks of taking to flight when shot at or disturbed. It dives, leaving scarcely a ripple, and does not appear again for a very long time. Under water it swims with great facility, for the paddles, which take the place of legs in its anatomy, are so placed that they do not work only under its body, like the legs of a duck, but sideways, or even upwards. It lives chiefly, I think, on little fishes and shrimps, which it pursues and catches under water. The Dabchick is on almost every tank in India, and I have even seen it in a well. I do not know how to describe it better than to say that you might take it for a small chicken without a tail. Its color is dark, glossy brown on the upper parts, with some rich chestnut on the sides of the neck. Young birds are lighter. The nest of the

Dabchick is a massive island of weeds collected by itself. In a little hollow on the top of this it lays four or five white eggs. They do not remain white very long, for the cautious little bird never leaves them without covering them with wet weeds, to conceal them from hostile eyes, and their chalky texture gets so stained that before they are hatched they have usually acquired a rich brown, or bronze hue. As soon as the little ones come out they take to the water and swim after their mother, or sit upon her back when they want a rest. The breeding season is of course the rains, when the tanks are full. At that time the Dabchicks get noisy, constantly uttering a shrill, querulous cry.

I ought to mention that Grebes are not classed with ducks in any modern system, and are in truth very different. Their feet are not webbed in the same way, but each toe has its own web and forms a separate oval paddle.

CHAPTER XXXII

THE GULLS AND TERNS

WITH the Gulls and Terns these papers close. Jerdon's book ends with the Cormorants, the Gulls coming between them and the Ducks; but I described the Cormorants in my last paper, along with the Ducks, because they present themselves to us in similar situations and are in many respects alike in their habits, while the Gulls form a distinct group which is in no danger of being confounded with any other. They are web-footed birds, whose home is on the waters, but not in the mild sense in which you may say the same of a Duck. For the wings of a Gull are more than its feet, and the winds are its element as much as the waves. Some kinds follow the larger rivers inland, and even visit lakes and large tanks, but most prefer the seacoast and the restless waves with which their own wild spirits are in sympathy. They often rest on reefs, or sandbanks, or fishing posts, or floating spars, and they are persuaded that the buoys in the harbor have been provided only for their convenience: but failing such solid resting-places they will take their seat on a dancing wave, with an easy grace which is all their own, and eye the passing boat with a happy and triumphant smile. They feed entirely on the wing, roaming up and down the coast, visiting all harbors and following ships at sea. Watching the flight of Gulls is one of the many delights of a sea voyage to me. For hours together they will keep their place about the stem of a fast steamer, as if it drew them on without effort on their part. They rise or sink, fall back a little or forge ahead, or pass from one side to the other, as if there were some hidden motive power at work within them. Outwardly there is nothing to be seen but a few lazy flaps now and then of their snowy wings. A plateful of scraps goes overboard, and in an instant they are a screaming and scrambling crowd, growing smaller and dimmer till they pass out of sight altogether as the swift ship goes on her way. Put in a quarter of an hour, lo! They are about us again as if they had never been absent.

There is a fashion in dress among birds as among their betters, and with Gulls and Terns the fashion is to wear a gray cloak, or mantle, over a suit of immaculate white. There are a few eccentric species, but as a rule almost the only difference between one and another is in the tint of the mantle. One will be a pale French gray, while another is dark slaty.

The tips of the wings and the end of the tail may be black, and in summer the correct thing is a sable cap, or a silky black topknot. Add to this that the young birds differ considerably in these same points from those that are advanced in age, and you will see that it is no easy matter for a man who has not made a special study of the subject to distinguish the different species of Gulls that may be seen about the Bombay harbor. He certainly will not do it with the aid of any description that I can give. But any one may learn the difference between a Gull and a Tern. Terns are smaller birds, with much longer and more pointed wings and deeply forked tails. These differences are accounted trivial by the anatomist, but they have the advantage of being obvious to the unlearned; and, as far as my own observation goes, they indicate a difference, which ought not to be overlooked between the habits of the two groups of birds. Terns are fishers, which catch their slippery prey by dropping head foremost into the water, often disappearing entirely for a second or two. When the bird emerges it is holding a wriggling little fish cross-wise in its sharp beak, in which position the fish cannot possibly go down its throat, so, giving a pretty little shrug of its shoulders to shake off the water, it rises ten or twenty feet and then tosses the fish into the air and catches it again by the head. This maneuver is followed by the magical disappearance of the fish. It is a pretty sight to watch a flock of Terns following a shoal of little fishes with clamorous glee, dropping one after another with a splash and rising again and chasing each other, as if they had a stock of breath like the widow's cruse of oil. Now all this is impossible to a Gull. It is a tramp, following ships for the offal and scraps that may be thrown overboard, picking up dead and sickly fishes, helping itself, in short, to anything that floats, but never dipping below the surface of the water. This is the difference between a Gull and a Tern, and to me it seems of more consequence than the number of feathers in the tail, or the bristles about the nose.

The commonest Gull on our coast is, I think, the Brown-headed Gull (*Larus bunnicephalus*), but it is not easily distinguished on the wing from the Laughing Gull (*L. ridibundus*), which is also plentiful. Both birds are pearl-gray on the mantle and pure white on the head, neck, body and tail." Before they leave us in the hot season (for they breed in Europe or Central Asia) their heads become dark brown or sepia. Their bills and feet are red. In young or youngish birds the tail is edged with black. The points of the wings are always black, with a broad white band across them, and the principal difference between the Brown-headed and the Laughing Gulls is in the shape of this white band. Another common species is the Herring Gull (*Larus affinis*—*L. fuscus* in Jerdon), a larger bird, with a slate-colored mantle. Its bill and feet are yellow, and it does not put on a brown cap in winter. Young birds are brown, and though they change as they grow older, it is about three years before they acquire the pure gray and white plumage; so there may be a good deal of variety in the color of a flock. The Herring Gull breeds in Siberia.

Occasionally you will see a gigantic Gull sitting solitary on a buoy. If the hot season is approaching, its whole head and upper neck will be black, but in the cold season it will be pure white all over, save for the pale gray mantle and a little black on the tips of the wings. If it is a youth, it will be more or less brown or mottled. This is the Great Black-headed Gull (*Larus ichthyaetus*), which breeds in Siberia but roams all over India in the cold season. One other species may be mentioned, which attracts attention at once by its unusual color. The body and tail are white, but the mantle is dark brown, and the head,

neck and breast are more or less brown according to season. This is the Sooty Gull (*Larus hemprichi*), which meets us in crowds at Aden on the voyage home, and is common, I believe, along the coast as far east as Sind, but only occasionally appears in Bombay harbor.

Among the Terns, one may be distinguished by its size. This is the Large Sea Tern, as Jerdon calls it. In the "Avifauna of British India" it is the Large Crested Tern (*Sterna bergii*) it is pure white, with a gray mantle and a silky black crest. The bill is yellow and the feet black. This large Tern is very common all along the coast, and has a great fancy for perching on the tops of fishing stakes. There is a smaller species, which is very like it in color, but much paler Jerdon calls it the Smaller Sea Tern (*Sterna media*). Then there is the Gull-billed Tern (*Sterna anglica*), which has a black bill, and the White-cheeked Tern (*S. albigena*), and the Roseate Tern (*S. dougalli*), which is not mentioned in Jerdon at all. These all, and some others visit this coast in large numbers during the cold season, and even during the height of the monsoon they are seldom altogether absent. The Roseate Terns breed on the Vingorla Rocks during the monsoon, when they are inaccessible to every enemy except man and almost so to him. Among the rank grass which covers the tops of the islands the birds lay their eggs, jostling each other for room and killing each other's young and behaving like the wild savages that they are. Other species breed on islands in the Persian Gulf, or along the Mekran coast, but I do not think any of them migrate to such distant regions as the Gulls do.

There are several ocean birds more or less nearly related to the Gulls and Terns, which roam over the Arabian Sea and between Bombay and Aden, such as the Booby and the Shearwater and the Frigate Bird and the beautiful Tropic Bird. At times, in violent storms, these may be wrecked on our shores, but they do not belong to the Common Birds of Bombay.

WORKS BY THE SAME AUTHOR

THE TRIBES ON MY FRONTIER

BEHIND THE BUNGALOW

A NATURALIST ON THE PROWL

THE FIVE WINDOWS OF THE SOUL

CONCERNING ANIMALS & OTHER MATTERS